# NOTICE

## NO HAND CARRIED BIDS! NO MAILED BIDS!

Current security requirements established by the U.S. Capitol Police to screen mail being delivered to the U.S. Capitol Complex of buildings preclude the use of U.S. Postal Service by offerors to deliver their proposals submitted in response to this solicitation. In addition, because all packages must be screened for security purposes at a central location prior to their delivery, the Architect of the Capitol cannot accept packages containing offers handcarried directly to the Bid Room address within the Ford House Office Building, as specified elsewhere in this solicitation, or at any other location in the U.S. Capitol Complex of buildings.

Due to these unusual circumstances the Procurement Division for the Architect of the Capitol will only accept offers/proposals via UPS or FEDEX at the address noted below. All handcarried offers/proposals will be rejected. Any attempt to hand carry an offer/proposal to any location in the U.S. Capitol Complex of buildings will be refused. See Section L for submission of offers. Offerors are advised when sending proposals via FEDEX or UPS <u>not</u> to use same day delivery. FEDEX/UPS often subcontract out the delivery for sameday service. It is necessary for delivery personnel to arrive in a FEDEX/UPS truck and be in a uniform recognized as FEDEX/UPS at the delivery point. Offerors are encouraged to determine who will be making the delivery when making arrangements with FEDEX/UPS.

All UPS and FEDEX deliveries are to be made to the Ford House Office Building at the following address:

Architect of the Capitol Procurement Division Ford House Office Building Attn: John Friedhoff Room H2-263 Second and "D" Streets, S.W. Washington, DC 20515

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Architect of the Capitol Procurement Division Ford House Office Building Attn: Chris Lindsay Room H2-263 Second and "D" Streets, S.W. Washington, DC 20515

SOLICITATION, OFFER, AND AWARD Architect of the Capitol			1. REQUISIT PP 080171				2. PR	OJECT NO			520 51	
3. ÇO	NTRAC	CT NUMBER	4. SOLICITATION N	JMBER	5. TYPE OF SOLICITATIO SEALED BID (IFB)			N 6. TIT	LE: Annual	Maintenance for	Electric	al Equipment
			RFP080040 = R F P 0800	NEGOTIATED (DED)		7. DAT	TE ISSUED	: 05/07/2008				
B. ISSUED BY AOC - Procurement Division 2nd & D Streets, SW Room H2-263 WASHINGTON, DC 20515				9. ADDRESS OFFER TO (If other than Item 8) AOC - Procurement Division 2nd & D Streets, SW Room H2-263 WASHINGTON, DC 20515					2 #II			
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		F	PART I - SCHEDULE						PART II - CO	NTRACT CLAUSES	3	
X	A	SOLICITATION/CONTRA	CT FORM		7/1	X		ONTRACT C				14-27
Х	В	SUPPLIES OR SERVICE			2-3	_		T III - LIST O	F DOCUMEN	TS, EXHIBITS AND	OTHER	
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× ,	G	DELIVERIES OR PERFO			9-12	х			And and a second second	OTICES TO OFFER	IORS	34-37
x	Н	SPECIAL CONTRACT RE			13	×	M E	VALUATION	FACTORS F	OR AWARD		38-40
pei	iod is i	inserted by the offeror) for	undersigned agrees, if thi rom the date for receipt of	offers specified	above, to fu		90 any or all it			days (60 CALEN		
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I. NA	ME OF	CONTRACTING OFFI			25. UNI	TED S	TATES OF	AMERICA	1		26	6. AWARD DATE
		Joh	n Friedhoff		BY							
							(Signature	of the Cor	ntracting Of	ficer)		

## Section B - Supplies or Services and Prices/Costs

Electrical Preventive Maintenance and Testing

Description:

### BASE

		<u> </u>							
Number	Commodity Name	Quantity	Unit of Issue	Unit Price (\$)	Total Cost (\$, Inc. disc				
1	ANNUAL MAINTENANCE FOR ELECTRICAL	Total : 1.00	EA	\$	\$				
	EQUIPMENT IN THE CPP								
	Description:BASE YEAR 1.PROVIDE AND IMPLEME	ENT A COMPLETE AND	COMPREHEN	SIVE PREVENTI	VE MAINTENANCE PRO				
	GRAM FOR THE ELECTRICAL DISTRIBUTION SYST	EM IN THE CPP FACILI	TY DEFINED	ALL ELECTRICA	L EQUIPMENT AT THE				
	CPP INCLUDING BUT NOT LIMITED TO : MEDIUM V	OLTAGE SWITCH-GEAR	R, MOTOR CO	NTROL CENTER	, PANEL-BOARDS, DIS				
	TRIBUTION PANEL-BOARDS, LOW AND EDIUM VOLTAGE STARTER, LOW AND MEDIUM VOLTAGE VARIABLE SPEED DRI								
	THE INTENT OF THE WORK LIST VED BELOW IS TO PREFORM THIS MAINTENANCE WITHIN THE RECOMMENDED GUILDE								
	PUT FORTH IN THE NETA MAINTENANCE TESTING	SPECIFICATIONS FOR	ELECTRICAL	POWER DISTRI	BUTION EQUIPMENT				
	AND SYSTEMS DATED 2005 (NETA MTS 2005) ALL	REFERENCED TABLES	AND PROCE	DURES CAN BE	FOUND WITH IN THIS				
	STANDARD. INCLUDE, BUT IS NOT LIMITED TO: W	EST REFRIGERATION I	PLANT, WEST	REFRIGERATIO	N EXPANSION, BOILER				
	SERVICES AND	MATERIALS AS FOL-							
	LOWS FOR ALL ANNUAL PREVENTATIVE MAINTEN	ATTACHMENTS	PROVIDE ITEMIZED						
	PRICINGAS AS OUTLINED ON THE PRICING SHEET	IN ATTACHMENTS 3. I	PROVIDE AND	MAINTAIN A WE	A WRITTEN SCHEDULE TH/				
	OUTLINES ALL OF THE WORK TO BE COMPLETED	UNDER THE CONTRAC	T. THIS SCH	EDULE MUST BE	SUBMITTED TO THE				
	AOC FOR REVIEW AND APPROVAL WITH IN 15 DAY	S AFTER AWARD OF T	HE CONTRAC	CT 4. ONCE A PR	EVENTIVE MAINTE-				
	NANCE (PM) TASK HAS BEEN COMPLETED, THE P	FOLLOWING IS TO BE I	NCLUDED BR	EAKER, STARTE	ERS, INSPECTIONS, RE				
	LAYS, TRANSFORMERS, RELAY TEST, MAIN AND T	TE BREAKERS, VFD'S,	MCC, TRANSF	ER SWITCH, PA	NELBOARD, SWITCH				
	GEAR.								
2	OPTION YEAR 1	Total : 1.00	EA	\$	\$				
	Description:	3							
3	OPTION YEAR 2	Total : 1.00	EA	\$	\$				
	Description:								
4	OPTION YEAR 3	Total : 1.00	EA	\$	\$				
	Description:				L				
5	OPTION YEAR 4	Total : 1.00	EA	\$	\$				

Lump-Sum Price for Base

\$

PLEASE SEE ATTACHMENT B. AND FILL IN PRICING FOR ALL 38 LINE ITEMS. ATTACHMENT B SHALL BE RETURNED AS WELL AS SECTION B PRICING WITH YOUR PROPOSAL.

# Section C - Description/Specifications/Statement of Work STATEMENT OF WORK

Page 4 Note: 3 Pages as Follows.

# A. **Background:** Project: Electrical Preventive Maintenance and Testing File No.:

The Capital Power Plant was first constructed in the early 1900's. Currently they produce and distribute Steam, Condensate and Chilled Water used to heat and cool most of the facilities located on Capitol Hill Campus.

It is the intent of this project to preform preventive maintenance on the electrical power distribution systems within the Capitol Power Plant. This project shall include all of the electrical distribution equipment within this facility.

Some of the electrical distribution system in the Capitol Power Plant has been in service for over Forty (40) years. This system has been modified over the years and the AOC would like to maintain the current level of serviceability through preventive maintenance of this system.

#### B. Current Conditions:

The existing electrical distribution equipment in the Capitol Power Plant is in various different conditions of serviceability. This is manly due to recent projects which have replaced whole sections of the electrical distribution equipment. Currently, there is no single source or drawing which shows when and or what has been repaired or replaced. We do have and provide, as part of this project, drawings which can identify all of this equipment.

### C. Project Scope:

The purpose this project is to provide and implement a complete and comprehensive preventive maintenance program for the electrical distribution system in this facility. For the purposes of this project, Electrical Distribution Equipment is defined as all electrical equipment at the Capitol Power Plant including but not limited to: Medium Voltage Switch-Gear, Motor Control Centers, Panel-Boards, Distribution Panel-Boards, Low and Medium Voltage Starters, Low and Medium Voltage Variable Speed Drives. The intent of the work list below is to preform this maintenance within the recommended guideline put forth in the NETA Maintenance Testing Specifications for Electrical Power Distribution Equipment and Systems dated 2005 (NETA MTS 2005). All referenced tables and procedures can be found with in this standard.

The project shall include, but is not limited to:

1. All of the Electrical equipment in the West Refrigeration Plant, West Refrigeration Expansion, Boiler Plant and the East Refrigeration Plant. The contractor will provide all services and materials as follows for all annual, preventative maintenance as follows as outlined in attachment "A".

- 2. The Contractor shall provide itemized pricing as outlined on the pricing sheet in attachment "B". The AOC intends to award the Base Contract this year and award each option once the prior years work has been completed.
- 3. The Contractor shall provide and maintain a written Schedule that outlines all of the work to be completed under this contract. This schedule must be submitted to the AOC for review and approval with in 15 days after award of the contract.
- 4. Once a Preventive Maintenance (PM) task has been completed, The Contractor shall enter and record this activity in the AOC's work order system (TMA). The AOC will provide on site access to TMA, but the contractor is responsible for entering the data in to the system. All information for the prior month must be entered by the 15<sup>th</sup> of the current month.
- 5. The Contractor shall submit a Site Specific Safety Plan for the work that is being executed under this contract. The plan must be submitted to the AOC for review and approval with in 15 days after award.
- 6. The Contractor perform monthly on site progress meetings with the COTR/PM and key AOC personnel. The Contractor shall coordinate these meetings as well as record and maintain meeting minutes and any other information required.
- 7. The Contractor shall perform all of the work in accordance with the 2005 National Electrical Code and the AOC's Capitol Power Plant Lockout Tagout procedures. The contractor shall coordinate all required outages with Capitol Power Plant Personnel. These outages will be at the convenience of the Capitol Power Plant. The contractor shall not negatively impact the operations of the Capitol Power Plant. These outages must be shown on the schedule required by item #3.

#### D. Contractor Services:

- 1. General: The Contractor shall provide and maintain a written Schedule that outline the work to be completed under this contract. All work is to be performed in accordance with NETA MTS 2005.
- 2. Kick-Off Meeting: Meet with the Contracting Officer's Technical Representative (COTR)/AOC Project Manager (PM) to confirm the requirements for the work to be completed. Following the meeting, refine the Preventive Maintenance Schedule and submit to the COTR/PM for approval.
- 3. On Site Work Meeting: All contractor assigned personnel shall meet with the COTR/PM and key Capitol Power Plant personnel to review the Safety Plan and confirm the requirements for the work to be performed. Following the

meeting, the AOC will conduct a walk through of the areas where the work is to be performed.

- 4. Monthly Review Meetings: The Contractor shall conduct monthly meetings with the COTR/PM.
- 5. Final Turnover: Turnover any and all AOC supplied documentation (Drawings, O&M Manuals) to the COTR/PM.

#### E. Deliverables:

- 1. Deliverables shall be in accordance with the requirements set forth herein and in keeping with the best practices and professional industry standards.

  Provide ten (10) bound hard copies for each submittal and (1) one e-mail
- F. Submission Dates:
  - 1. Submission Schedule (Study):

The Contractor shall guarantee completion of the project no-later-than one year from award date.

a. Kick-off Meeting:

(contractor approach, project schedule, 3 week following Award and confirmation of Requirements)

b. Deliverables Submission: 2 weeks following Award

c. Monthly Review Meetings: 1 Every month following
Award

d. Final Turnover Documents: 52 weeks following Award

Allow a three-week review period by the AOC for each submittal.

- G. Contracting Officer's Technical Representative (PM): The AOC shall provide the name, address and telephone number of the COTR/PM at the time of contract award and the duties thereby delegated to that person.
- H. Formatting: Word 2003 or Excel 2003 compatable.
- I. Date of Last Revision: December 21, 2007

## Section D - Packaging and Marking

This page has been intentionally left blank.

#### Section E - Inspection and Acceptance

#### 52.252-2 Sec. E

#### 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

www.gsa.gov or www.arnet.gov

(End of clause)

Clauses By Reference

Clause	Title	Date
52.246-4	Inspection Of ServicesFixed Price	11/08/2006

#### Section F - Deliveries and Performance

8

- 1. The Contractor shall deliver the following submittals within the times specified below. An in-depth description of these submittals can be found in Section C, page 2 of the Statement of Work. Failure to provide timely delivery of these submittals may be considered to be grounds for termination for default.
- 2. The Contractor shall deliver the submittal identified in Paragraph 3 below for approval by the Government within 15 calendar days after the date of contract award. The Contractor shall deliver the submittals identified in Paragraph 3 below for approval by the Government within 60 calendar days after the date of award. The Government will review the submittals and either approve them as submitted, or mark required changes on them. Allow 3 weeks (21 calendar days) for the Government's response to each submittal submission. If changes are required, the Contractor shall deliver revised submittals for approval by the Government which incorporate all of the required changes within two weeks, (15 calendar days) after receipt by the Contractor of the marked up submittals.
- 3. A. Project Schedule & Confirmation of Requirements including planned outages
- B. Contractor Approach
- C. Site Specific Safety Plan
- D. Preventative Maintenance Schedule
- 4. The Contractor shall deliver submittals to:

Mr. Tom Costello, General Engineer Capitol Power Plant

tcostell@aoc.gov

Cell Phone: 202-841-5933

#### AOC52.211-4

Term of Contract (Jan 2007)

The term of the contract shall be from award of the contract for a 1 year base period with 4 one year option periods..

(End of clause)

#### 52.242-15

Stop-Work Order (Aug 1989)

- (a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either--
- (1) Cancel the stop-work order; or
- (2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.
- (b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

- (1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and
- (2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.
- (c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.
- (d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

#### 52.252-2 Sec. F

#### 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

www.gsa.gov or www.arnet.gov

(End of clause)

Clauses By Reference

Clause	Title	Date
52.247-34	F.O.B. Destination	11/08/2006

#### Section G - Contract Administration Data

Title:

AOC52.201-1	
Contracting Officers Authority (Jun 2004)	
notwithstanding any provision contained elsewhere in this co	ke or approve any changes in any of the requirements of this contract, ontract. In the event that the Contractor makes any change at the direction will be considered to have been made without authority and no acrease in costs incurred as a result thereof.
(End of clause)	
AOC52.201-2	v,
Contracting Officers Technical Representative (COTR) (Ma	ır 2005)
thereby delegated to that person. Any subsequent change to writing by the Contracting Officer. In no instance will the Co	one number of the COTR at the time of contract award and the duties the individual or the individual s responsibilities will be confirmed in OTR be delegated authority to order any change in the contractor s atracts for services or supplies, or (b) scope, the completion date for the for contracts for construction.
(End of clause)	
AOC52.211-1	
KEY PERSONNEL (Apr 2007)	
(a) The Contractor shall assign to this contract the following	key personnel as proposed in the Contractor's technical proposal:
Name:	
Title:	Telephone No
Name:	
	Telephone No
Name:	

(b) During the first ninety (90) days of performance, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment. The Contractor shall notify the Contracting Officer within 15 calendar days after the occurrence of any of these events and provide the information required by Paragraph (c) below. After the initial 90-day period, the Contractor shall submit the information required by Paragraph (c) to the Contracting Officer at least 15 calendar days prior to making any permanent substitutions.

\_ Telephone No. \_\_\_\_

- (c) The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutions, and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the person being replaced. The Contracting Officer will notify the Contractor within 15 calendar days after receipt of all required information of the decision on substitutions. The contract will be modified to reflect any approved changes of key personnel.
- (d) The approval of substitute personnel will not be considered to be grounds for an increase in the contract price.
- (e) The special security requirements in AOC52.223-5, Special Security Requirements, or AOC52.223-6, Special Security Requirements U.S. Supreme Court, shall apply to all approved Contractor personnel substitutions.

#### AOC52.211-2

Approval of Substitute Contractor Personnel (Jun 2004)

- (a) [During the first ninety days of performance], the Contractor shall make no substitutions of personnel unless the substitution is necessitated by illness, death, or termination of employment. The Contractor shall notify the Contracting Officer within 15 calendar days after the occurrence of any of these events and provide the information required by paragraph (b) below. [After the initial 90-day period], the Contractor shall submit the information required by paragraph (b) to the Contracting Officer at least 15 calendar days prior to making any permanent substitutions.
- (b) The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the person being replaced.
- (c) This paragraph applies only to a labor hour or time-and-materials contract. The Unit Price (hourly labor rate) for the approved substituted personnel shall remain the same as the rates of the relevant labor category, in the applicable Base Year or any of the subsequent Option Years (see the SCHEDULE OF ITEMS in Section B).
- (d) The special security requirements in AOC52.223-5, Special Security Requirements, or AOC52.223-6, Special Security Requirements U.S. Supreme Court, shall apply to all approved Contractor personnel substitutions.

(End of clause)

#### AOC52.222-2

Supplemental Wage Determination/rate Request (Sep 2004)

- (a) The wage determination or rate, hereby incorporated, does not include the classification, Pest Controller. the Contracting Officer submitted a request for a wage determination or rate to the U.S. Department of Labor, for a decision pertinent to the wage determination or rate applicable to the class of employee utilized in the work herein specified. As of the date of issue of this solicitation, such wage determination or rate has not been received by the Contracting Officer. Upon receipt, a copy of the Department of Labor s action will be forwarded to the contractor by the Contracting Officer.
- (b) In the event that a wage determination or rate is not forthcoming from the Department of Labor prior to the opening of offers, each offeror agrees, by signing and submitting its offer, to be bound to compliance with the pertinent wage determination or rate of the Department of Labor, as eventually promulgated.
- (c) If the action from Department of Labor results in a modification that is an increase to the wage and fringe benefit payments but shall not otherwise include any amount for general and administrative costs, overhead, or profit. The contractor also warrants that the price in this contract does not include any allowance for contingency to cover increased costs for which the adjustment is provided under a modification. In addition, the contractor shall provide, upon request, to the Contracting Officer the originals of any documentation the contractor used when preparing the proposal which will be utilized by the Contracting Officer to ensure that the payment of the adjustment will be for only those hours indicated under the specified category.

(End of clause)

#### AOC52.223-5

Special Security Requirements - Services (Jun 2007)

- (a) All vehicles, and contents, used by the Contractor or his subcontractors, which enter or leave United States Government property during performance of the work, will be subject to clearance, inspection and identification procedures conducted by the United States Capitol Police.
- (b) All persons entering the Legislative Branch Buildings shall gain access to the building by passing through x-ray screening devices. In addition, all handbags and all hand-carried items shall be screened by x-ray devices prior to their entry into the building.
- (c) All personnel provided by the Contractor and employed on the site of the work will be subject to a security background investigation. Each employee will be required to fill out an I.D. Request Form and U.S. Capitol Police Request for check of Criminal History Records and each employee will be photographed and fingerprinted. The Contractor shall provide any assistance required by any of its employees in completing the forms.

- (d) Prior to commencement of work, the contractor and all designated on-site employees will be required, on a one-time basis, to be fingerprinted in Washington D.C. The location for the Electronic Fingerprinting Service is the U.S. Capitol Hill Police, Fairchild Building, 499 South Capitol Street SW, Washington, DC 20003.
- (e) Within seven (7) calendar days after the date of contract award, the Contractor shall submit to the Contracting Officer's Technical Representative (COTR) a list of all employees proposed to be employed on this contract. This list shall include the employee's full name, date of birth and social security number.
- (f) While security background investigations are in process, the Contractor's employees must not be granted access to the Capitol Hill complex to perform work or provide services for the AOC unless they are escorted by an AOC staff member. "Escorted" is defined to mean that the AOC staff member will remain with the employee(s) at all times during the performance of the work. Any of the Contractor's employees who are perceived by the Contracting Officer as a security risk as a result of evidence discovered in the background security investigation will not be issued an Identification Card, will be denied access to the site of the work, and the Contractor will be directed to remove such employee from performance of any of the contract work, whether it be on or off the work site. Any contractor employee denied access to the site of work on a contract or task/delivery order as a result of a security investigation may not apply for access to any other AOC/U.S. Supreme Court contract or task/delivery order work site.
- (g) An identification card, with photograph, will be prepared for each employee of the Contractor requiring access to the site. The identification card shall be dated to indicate the period of time for which it is to remain valid from the date the employee reports for duty until the applicable date which occurs first: the expiration of the contract, or the last date of the employee's tour of duty with the Contractor. All contractor personnel must wear the ID badge whenever on the Capitol complex premises or when attending off-site functions on behalf of the AOC. ID badges must be worn in such a manner that contractor personnel can be easily identified as such.
- (h) The Contractor is fully responsible to return:
- (1) The ID badge of any individual employee, including subcontractor personnel, who is removed for any reason including but not limited to illness, or dismissal;
- (2) The ID badges of all contractor employees, including subcontractor personnel, whose performance under the contract is completed in advance of final contract job completion; and
- (3) All outstanding ID badges issued for the contractor and its employees, including subcontractor personnel, within 24 hours of on site contract job completion.
- (i) ID badges are to be hand delivered by the contractor within 24 hours of any of the events listed under (f) above to the Contracting Officer's Representative.
- (j) The Contractor's failure to return any ID badge, access card, or key issued under this contract or order shall result in a deduction of \$100.00 from the contract per ID badge, access card, and/or key not returned.

#### AOC52.223-7

Special Security Clearance and Inspection Procedures (Jun 2004)

- (a) All vehicles and contents used by the Contractor or his subcontractors which enter or leave United States Government property during performance of the work will be subject to clearance, inspection, and identification procedures conducted by the United States Capitol Police. See the attachment entitled U.S. CAPITOL POLICE NOTICE in Section J for instructions prior to delivery.
- (b) All persons entering the Legislative Branch Buildings shall gain access to the building by passing through x-ray screening devices. In addition, all handbags and all hand-carried items shall be screened by x-ray devices prior to entry into the building.

(End of clause)

#### AOC52.223-8

#### DELIVERY VEHICLE INSPECTION REQUIREMENTS (Apr 2007)

- (a) All vehicles and contents used by the Contractor or his subcontractors which enter or leave United States Government property during performance of work under this contract will be subject to clearance, inspection, and identification procedures conducted by the United States Capitol Police.
- (b) Mobile Vehicle and Cargo Inspection System (Mobile VACIS). All delivery vehicles carrying fuel, garbage, or similar cargo that

cannot be offloaded for inspection and security screening shall utilize the Mobile VACIS located at Third and Pennsylvania Avenue, NW, Washington, DC, for inspection prior to making deliveries to any building within the Capitol Complex, including, but not limited to, the U.S. Capitol Building; the U.S. Botanic Garden; the Hart, Dirksen, and Russell Senate Office Buildings; the Rayburn, Longworth, Cannon, and Ford House Office Buildings; the Thomas Jefferson, John Adams, and James Madison Memorial Library of Congress buildings; the Capitol Power Plant; the Capitol Visitors Center; and the U.S. Supreme Court and Thurgood Marshall Federal Judiciary Buildings.

- (c) 4700 Shepherd Parkway SW inspection facility. All other vehicles making deliveries to the above listed locations except for the U. S. Supreme Court shall utilize the off-site inspection and screening facilities at 4700 Shepherd Parkway SW, Washington, DC 20032.
- (d) For all deliveries within seven calendar days or prior to the first delivery, the contractor shall provide the following information to the U.S. Capitol Police:
- (1) List of drivers;
- (2) Date of birth for each driver;
- (3) Social Security Number of each driver;
- (4) Vehicle make;
- (5) Vehicle model;
- (6) License tag number and state where vehicle is licensed;
- (7) Color of vehicle; and
- (8) Contractor name, if shown on the vehicle.
- (e) Information for deliveries made through the Mobile VACIS unit must be faxed to (202) 228-4313. For verification of receipt, the contractor may call (202) 224-9728. Updates to the information for Mobile VACIS deliveries must be sent to the U.S. Capitol Police throughout the period of performance of the contract.
- (f) Information for deliveries made through the Shepherd Parkway facility must be faxed to (202) 226-0571. For verification of receipt, the contractor may call (202) 226-0905. Updates to the information must be renewed April 30, August 31, and December 31 of each year and provided to the U. S. Capitol Police whenever repetitive deliveries are anticipated.

(End of clause)

#### AOC52.242-2

#### CONTRACTOR PERFORMANCE EVALUATIONS (DEC 2006)

At the conclusion of contract performance and/or at any point during the performance of this contract, the AOC may elect to evaluate the Contractor and submit a final or interim performance evaluation into the appropriate on-line database designated as the repository of Contractor evaluations for the Federal Government. Any evaluation submitted shall include input from the Contracting Officer's Technical Representative and other agency personnel, as appropriate, and the Contracting Officer. The Contractor shall have the opportunity to review any evaluations and submit supporting information for any differing of positions between the Contractor and the AOC in accordance with the protocol established by the specific on-line database.

(End of clause)

## Section H - Special Contract Requirements

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#### Section I - Contract Clauses

#### 52.216-20

Definite Quantity (Oct 1995)

- (a) This is a definite-quantity, indefinite-delivery contract for the supplies or services specified, and effective for the period stated, in the Schedule.
- (b) The Government shall order the quantity of supplies or services specified in the Schedule, and the Contractor shall furnish them when ordered. Delivery or performance shall be at locations designated in orders issued in accordance with the Ordering clause and the Schedule.
- (c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.
- (d) Any order issued during the effective period of this contract and not completed within that time shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; *provided*, that the Contractor shall not be required to make any deliveries under this contract after October 1, 2013. (End of clause)

#### 52.217-8

Option to Extend Services (Nov 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 30 days of the end date of the contract performance period.

(End of clause)

#### 52.232-18

Availability of Funds (Apr 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until the Contractor receives notice of such availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

#### 52.222-42

Statement of Equivalent Rates for Federal Hires (May 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

This Statement is for Information Only:

It is not a Wage Determination

Employee Class		Monetary Wage - Fringe Benefits			
WL-11	\$31.47	Electrician Helper			
WL-12	\$33.81	Electrician			

Employee Class	Monetary Wage - Fringe Benefits			

#### 52.243-7

#### 52.243-7 NOTIFICATION OF CHANGES (APR 1984)

- (a) Definitions. "Contracting Officer," as used in this clause, does not include any representative of the Contracting Officer.
- "Specifically authorized representative (SAR)," as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this subparagraph and shall be issued to the designated representative before the SAR exercises such authority.
- (b) *Notice*. The primary purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing, within 30 (to be negotiated) calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oral communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the Contractor, the notice shall state--
- (1) The date, nature, and circumstances of the conduct regarded as a change;
- (2) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such conduct;
- (3) The identification of any documents and the substance of any oral communication involved in such conduct;
- (4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
- (5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause, including--
- (i) What contract line items have been or may be affected by the alleged change;
- (ii) What labor or materials or both have been or may be added, deleted, or wasted by the alleged change;
- (iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change;
- (iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are estimated; and
- (6) The Contractor's estimate of the time by which the Government must respond to the Contractor's notice to minimize cost, delay or disruption of performance.
- (c) Continued performance. Following submission of the notice required by (b) above, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in (b) above, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall countermand any action which exceeds the authority of the SAR.
- (d) Government response. The Contracting Officer shall promptly, within 60 (to be negotiated) calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either-
- (1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;
- (2) Countermand any communication regarded as a change;
- (3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or
- (4) In the event the Contractor's notice information is inadequate to make a decision under (1), (2), or (3) above, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.
- (e) Equitable adjustments. (1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor, and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made--

- (i) In the contract price or delivery schedule or both; and
- (ii) In such other provisions of the contract as may be affected.
- (2) The contract shall be modified in writing accordingly. In the case of drawings, designs or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change confirmed by the Contracting Officer under this clause is included in the equitable adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of the property. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in (b) and (c) above.

NOTE: The phrases "contract price" and "cost" wherever they appear in the clause, may be appropriately modified to apply to cost-reimbursement or incentive contracts, or to combinations thereof.

(End of clause)

#### 52.246-20

Warranty of Services (May 2001)

- (a) Definition. "Acceptance," as used in this clause, means the act of an authorized representative of the Government by which the Government assumes for itself, or as an agent of another, ownership of existing and identified supplies, or approves specific services, as partial or complete performance of the contract.
- (b) Notwithstanding inspection and acceptance by the Government or any provision concerning the conclusiveness thereof, the Contractor warrants that all services performed under this contract will, at the time of acceptance, be free from defects in workmanship and conform to the requirements of this contract. The Contracting Officer shall give written notice of any defect or nonconformance to the Contractor

[Contracting Officer shall insert the specific period of time in which notice shall be given to the Contractor]

This notice shall state either--

- (1) That the Contractor shall correct or reperform any defective or nonconforming services; or
- (2) That the Government does not require correction or reperformance.
- (c) If the Contractor is required to correct or reperform, it shall be at no cost to the Government, and any services corrected or reperformed by the Contractor shall be subject to this clause to the same extent as work initially performed. If the Contractor fails or refuses to correct or reperform, the Contracting Officer may, by contract or otherwise, correct or replace with similar services and charge to the Contractor the cost occasioned to the Government thereby, or make an equitable adjustment in the contract price.
- (d) If the Government does not require correction or reperformance, the Contracting Officer shall make an equitable adjustment in the contract price.

(End of clause)

#### AOC52.202-1

Definitions (Jun 2004)

- (a) The term "head of the agency" as used herein means the Committee, Commission, or other authority of the Legislative Branch of the Government having final jurisdiction or supervision over the work involved. The term "other authority" as used in this paragraph includes the Contracting Officer in cases in which he has final jurisdiction or supervision over the work involved.
- (b) The term "Architect" as used herein means the Architect of the Capitol.
- (c) The term "Contracting Officer" as used herein means the Architect of the Capitol or his duly authorized representative.
- (d) The term "his duly authorized representative" as used herein means any person or persons or board authorized to act for the head of the agency within the scope of their authority.
- (e) Except as otherwise provided in this contract, the term "subcontracts" includes purchase orders placed for performance under this contract.

#### AOC52.203-1

Advertising/Promotional Materials (Dec 2005)

- (a) It is the policy of the Congress to discourage contractors providing services and supplies to the Legislative Branch entities, including the Architect of the Capitol, from advertising practices that feature the Capitol and Capitol Complex in a manner in which conveys, or is reasonably calculated to convey, a false impression of sponsorship, approval or endorsement of any product or service by the Congress, the Government of the United States, or any Department, Agency or instrumentality thereof.
- (b) Contractors performing construction services for Legislative Branch entities, including the Architect of the Capitol, are discouraged from capitalizing on their contractual relationships with such entities and shall not engage in advertising practices which convey, or are reasonably calculated to convey, a false impression of sponsorship, approval or endorsement of any product or service by the Congress, the Government of the United States, of any Department, Agency or instrumentality thereof. This includes utilizing, in conjunction with the fact of their contractual relationship, images of the Capitol, any other buildings in the Capitol Complex, or any part of the United States Capitol Grounds in their advertising or promotional materials; and/or publishing or disseminating the aforementioned advertising or promotional materials.
- (c) The Contractor, by signing this contract, agrees to comply with the foregoing and to submit any proposed advertising or promotional copy connected in any manner with this contract and/or the Capitol, other Capitol Complex Buildings, or the United States Capitol Grounds to the Contracting Officer for approval prior to publication.
- (d) If this solicitation is for supplies or services, including construction, to be provided to or performed for the United States Supreme Court, the Contractor, by signing this contract, agrees that he or she will not advertise the award of the contract in his/her commercial advertising in such a manner as to state or imply that the Supreme Court of the United States endorses a product, project, or commercial line of endeavor.

(End of clause)

#### AOC52.203-2

Disclosure of Information to the General Public (Jun 2004)

- (a) Promptly after receiving any request from the general public for information on or data derived from this contract, the contractor shall notify the Architect of the Capitol, Procurement Division. The contractor shall cooperate with the Procurement Division in compiling or collecting information or data if the Architect of the Capitol determines the information or data to be releasable.
- (b) General public, for purposes of this clause, are those groups or individuals who are not authorized by law or regulation to have access.
- (c) This clause is not intended to prevent the contractor from providing contract information or data which the contractor is required to provide in order to conduct its business, such as insurance, banking, subcontracting.
- (d) The contractor is permitted to request that proprietary information or data not be released if such release would harm or impair the contractor in conducting its normal business. Such request must be documented with clear and specific grounds for that claim.

(End of clause)

#### AOC52.203-3

Officials Not to Benefit (Nov 2004)

No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom.

(End of clause)

#### AOC52.203-4

Dissemination of Contract Information (Nov 2004)

Unless otherwise provided in this contract, the Contractor shall not publish, permit to be published, or distribute for public consumption, any information, oral or written, concerning the results of, conclusions made pursuant to, or performance under this contract without prior written consent of the Contracting Officer, until such time as the Government may have released such

information to the public.

(End of clause)

#### AOC52.203-5

Confidentiality Requirement (Nov 2004)

The Contractor agrees that any information supplied by the Architect to the Contractor shall be considered confidential and/or proprietary, and agrees to hold such information in confidence. The Contractor further agrees not to disclose such information to a third party without the prior written consent of the Architect.

(End of clause)

#### AOC52.204-4

AOC52.204-4 Personal Identity Verification of Contractor Personnel (Sep 2007)

- (a) By entering into this contract, the Contractor agrees to comply with all Federal laws that apply to the Contractor's activities, including but not limited to the U.S. Citizenship and Immigration Services' requirement to maintain a signed copy of I-9 Employment Eligibility Verification for each employee in accordance with 8 U.S.C. 1324(a).
- (b) The Employment Eligibility Verification Program (E-Verify), operated by the Department of Homeland Security and the Social Security Administration, allows U.S. employers to verify name, date of birth, and Social Security Number, as well as immigration information for non-citizens, against Federal databases in order to verify the employment eligibility of both citizen and non-citizen new hires. All contractors receiving AOC contracts are strongly encouraged to use this program to verify the status of their personnel. Information about the program can be obtained at <a href="https://www.dhs.gov/E-Verify">www.dhs.gov/E-Verify</a> or by calling 1-888-464-4218.
- (c) The Contractor shall insert this clause in all subcontracts when the subcontractor is required to have physical access to a Federally-controlled facility or access to a Federal information system.

(End of clause)

#### AOC52.204-1

Printed or Copied Double-sided on Recycled Paper (Jun 2004)

The Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied doubled-sided on recycled paper and meet minimum content standards when not using electronic commerce methods to submit information or data to the Government.

(End of clause)

#### AOC52.207-1

Right of First Refusal of Employment (Jun 2004)

- (a) The Contractor shall give Government employees who have been or will be adversely affected or separated as a result of award of this contract the right of first refusal for employment openings under the contract in positions for which they are qualified, if that employment is consistent with post-Government employment conflict of interest standards.
- (b) Within 10 days after contract award, the Contracting Officer will provide to the Contractor a list of all Government employees who have been or will be adversely affected or separate as a result of award of this contract.
- (c) The Contractor shall report to the Contracting Officer the names of individuals identified on the list who are hired within 90 days after contract performance begins. This report shall be forwarded within 120 days after contract performance begins.

(End of clause)

#### AOC52.215-10

Examination of Records (Jun 2004)

(a) The Contractor agrees that the Architect of the Capitol or any duly authorized representatives shall, until the expiration of 3 years

after final payment under this contract, have access to and the right to examine any books, accounting procedures and practices documents, papers, records and other data regardless of whether such items are in written form, in the form of computer data or in any other form and other supporting evidence, involving transactions related to this contract or compliance with any clause or certification thereunder.

- (b) The Contractor further agrees to include in all its subcontracts hereunder a provision to the effect that subcontractor agrees that the Architect of the Capitol or any authorized representatives shall, until the expiration of 3 years after final payment under the subcontract, have access to and the right to examine books, documents, papers, records other data regardless of whether such items are in written form, in the form of computer data or in any other form, and other supporting evidence, involving transactions related to the subcontract or compliance with any clause or certification thereunder.
- (c) The term subcontract as used in this clause excludes purchase orders not exceeding \$10,000.

(End of clause)

#### AOC52.216-1

Economic Unit Price Adjustment (Jun 2004)

- (a) The Contractor shall promptly notify the Contracting Officer of the amount and effective date of each decrease in any applicable established price. Each corresponding contract unit price shall be decreased by the same percentage that the established price is decreased. The decrease shall apply to those items delivered on and after the effective date of the decrease in the Contractor's established price, and this contract shall be modified accordingly.
- (b) If the Contractor's applicable established price is increased after the contract date, the corresponding contract unit price shall be increased, upon the Contractor's written request to the Contracting Officer, by the same percentage that the established price is increased, and the contract shall be modified accordingly.
- (c) The Contractor agrees to provide the Government, as represented by the Architect, with a minimum of three (3) calendar days written notice, prior to the effective date of a unit price adjustment, of a proposed price increase or decrease, as defined above. Any increase or decrease shall apply to deliveries made on or after the effective date of such increase or decrease in unit price.
- (d) Upon receipt of the written notice of a proposed increase in unit price, as required above, the Government shall either make payment to the Contractor on basis of the unit price, increased as stated in such notice, for deliveries made on or after the stated effective date, or shall terminate the contract forthwith by written notice to the Contractor, without liability to either party.

(End of clause)

#### AOC52.219-1

Utilization of Small Business Concerns (Aug 2004)

- (a) It is the policy of the Government as declared by the Congress that a fair proportion of the purchases and contracts for supplies and services for the Government be placed with all types of small business concerns as determined by the size standards in 13 CFR 121.
- (b) The Contractor agrees to accomplish the maximum amount of subcontracting to all types of small business concerns that the Contractor finds to be consistent with the efficient performance of this contract.

(End of clause)

#### AOC52.222-3

Convict Labor (Jun 2004)

In connection with the performance of work under this contract the Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, approved September 10, 1965, 18 U.S.C. 4082(c)(2).

(End of clause)

#### AOC52.222-4

Overtime Work (Aug 2004)

No extra reimbursement will be allowed for work performed outside regular working hours or on Saturdays, Sundays, or holidays and, for work performed in the District of Columbia, Presidential Inauguration Day, unless such work is authorized by the Contracting

Officer; and provided such work is not otherwise required to be performed under the terms of the contract. If said authorization is verbal, with written verification thereof by signature of the Contracting Officer on the employee's weekly time record (see AOC52.232-2, Payments - Services or AOC52.232-3, Payments - Services Utilizing Time Records).

(End of clause)

#### AOC52.222-5

Collective Bargaining Agreements (Jun 2004)

The Contractor shall comply with the requirements of Paragraph 52.222-41(m), Service Contract Act of 1965, as amended, regarding collective bargaining agreements. The information required shall be FAXED to 202-225-3221 or hand carried to: Procurement Division, Room H2-263, Ford House Office Building, 2nd and "D" Streets, S.W., Washington, D.C. - 20515. The agreement can also be FEDEXed to the following address:

Architect of the Capitol Procurement Division Ford House Office Building Attn: John Friedhoff Room H2-263 Second and D Streets, S.W. Washington, DC 20515

(End of clause)

#### AOC52.223-4

Transmission or Posting of Drawings/Specifications (Jun 2004)

Due to security issues, the contractor is strictly prohibited from placing or transmitting drawings and specifications on the internet or modem without express permission from the Architect of the Capitol.

(End of clause)

#### AOC52.223-9

Accident Prevention and Safety and Health Programs (Sep 2004)

- (a) The Contractor shall comply with the safety and health standards published in 41 C.F.R. Part 50-205, including any matters incorporated by reference therein.
- (b) The Contractor shall also comply with the regulations issued by the Secretary of Labor pursuant to the Williams-Steiger Occupational Safety and Health Act of 1970, as set forth in Title 29 of the Code of Federal Regulations.
- (c) The Contractor shall bring to the attention of the Architect any work encountered that may involve entry into a suspected confined space as defined by OSHA. A determination will be made by the Architect, and if the areas is deemed a permit required confined space, additional protective measures will be needed, per OSHA requirements.
- (d) In the event that conditions on the site pose an imminent danger or threat to the Contractor's workers, the public, Government employees, other persons, or to Capitol complex structures and property of historical significance, the Contracting Officer can verbally order the Contractor to stop work operations in the specified area until said conditions are corrected to the Contracting Officer's satisfaction. The Contracting Officer shall promptly issue a written order to stop the work to the Contractor formalizing the specifics of the verbal stop work order.
- (e) The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.

(End of clause)

#### AOC52.228-2

Insurance - Work on a Government Installation (Jul 2005)

(a) The Contractor shall, at his own expense, provide and maintain during the entire performance of this contract at least the kinds and minimum amounts of insurance as required in this clause.

(b) Within twenty (20) calendar days after the date of contract award or before commencing work under this contract, whichever is earlier, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. A Certificate of Insurance evidencing the Contractor's compliance with the requirements of this clause, identifying all policies of insurance and sureties proposed for the provision of liability coverage pertinent to the work of the instant contract, including the endorsement required in this paragraph, and manually countersigned by an authorized representative of the insurance company shall be submitted in accordance with the time frame stated in this paragraph. All policies for liability protection, bodily injury, or property damage shall include the United States of America, acting by and through the Architect of the Capitol, as an additional insured with respect to operations under this contract. Each policy of insurance shall contain the following endorsement, which may be attached as a rider:

"It is understood and agreed that the Contractor's Insurance Company or surety shall notify the Architect of the Capitol, in writing, thirty (30) calendar days in advance of the effective date of any reduction in or cancellation of this policy."

- (c) Insurance and required minimum liability limits are:
- (1) Appropriate bodily injury and property damage liability insurance, with limits of not less than \$500,000 for each occurrence and \$2,000,000 for annual aggregate, including requirements for protection of hoisting and scaffolding operations, when applicable, and servicing areas adjacent to the building;
- (2) Automobile bodily injury liability insurance with limits of not less than \$200,000 for each person and \$500,000 for each accident, and property liability insurance, with a limit of not less than \$20,000 for each accident. A combined single limit for these coverages is acceptable; and/or
- (3) Workmen's compensation insurance as required by the laws of (1) the District of Columbia for work performed on a Government site located in the District of Columbia; (2) the State of Maryland for work performed on a Government site located in Maryland; or (3) the Commonwealth of Virginia for work performed on a Government site located in Virginia.
- (d) The Contractor shall insert the substance of this clause, including this paragraph, in subcontracts under this contract that require work on a Government installation, and shall require subcontractors to provide and maintain the insurance required in this clause. The Contractor shall maintain a copy of all subcontractors proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

#### AOC52.228-4

Indemnification and Hold Harmless Agreement (Jun 2004)

The Contractor agrees to indemnify and hold the Government harmless against any and all claims for damages to persons or property from any cause or causes whatsoever arising out of the performance of services covered by the contract; including, but not limited to, errors, omissions or negligent acts of the Contractor, but excluding active negligence of the Government, and against any and all costs, expenses, attorney's fees, and liability incurred by the Government in defending against such claims, whether the same proceed to judgement or not. In the prosecution of any successful claim or suit by the Government for the enforcement of this contract, the Contractor shall reimburse the Government for any reasonable attorney's fees and costs of claim or suit incurred by the Government.

(End of clause)

#### AOC52.232-2

Payments - Services (Mar 2006)

- (a) Invoices shall be issued at the end of each month in which services are performed by the Contractor. Until further notice, properly certified invoices shall be FAXED to the Accounting Office, Architect of the Capitol at 202-226-2580. Information concerning requirements for payment requisitions must be secured by telephoning the Accounting Officer at (202) 226-2552. Payment will be made on a monthly basis. To assist the AOC in making timely payments, the Contractor is requested to furnish the following additional information on the invoice:
- (1) Contract number;
- (2) Name, address and Taxpayer I.D.of Contractor;
- (3) Invoice Date;
- (4) Unique invoice number for that particular invoice;

- (5) Period the payment covers; and
- (6) Amount by line item including quantity and unit pricing (see SCHEDULE OF ITEMS in Section B).
- (b) Requirement when contractor employee(s) is provided on-site office space. As verification of the above time records submitted by the Contractor, each of the Contractor s employees will be required to sign and submit to the COTR a weekly time record sheet, as provided by the Architect, showing the number of regular and overtime hours, if any, worked by that employee during that week. The time record sheet will be verified and countersigned, if correct, by the COR and a copy thereof will be provided to the Contractor for record purposes.
- (c) Payments will be made directly to the contractor's financial institution through Direct Deposit/Electronic Funds Transfer (DD/EFT). The Contractor's attention is directed to the requirements of AOC52.232-6, Payment by Electronic Funds Transfer Other Than Central Contractor Registration.

#### AOC52.232-6

Payment by Electronic Funds Transfer - Other than Central Contractor Registration (Jun 2004)

- (a) Method of payment.
- (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT) except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer.
- (2) In the event the Government is unable to release one or more payments by EFT, the contractor agrees to either
- (i) Accept payment by check or some other mutually agreeable method of payment; or
- (ii) Request the Government to delay payment until such time as the Government makes payment by EFT (but see paragraph (d)).
- (b) Mandatory submission of Contractor's EFT information. (1) The Contractor is required to provide the Government with the information required to make payment by EFT (see paragraph (i) of this clause). The contractor shall provide this information directly to the office designated in paragraph (k) to receive that information (hereafter: "designated office") by three working days after notification of contract award. If not otherwise specified in this contract, the payment office is the designated office for receipt of the contractor's EFT information. If more than one designated office is named for the contract, the contractor shall provide a separate notice to each office. In the event that the EFT information changes, the contractor shall be responsible for providing the updated information to the designated office(s).
- (2) If the contractor provides EFT information applicable to multiple contracts, the contractor shall specifically state the applicability of this EFT information in terms acceptable to the designated office. However, EFT information supplied to a designated office shall be applicable only to contracts that identify that designated office as the office to receive EFT information for that contract.
- (c) Mechanisms for EFT payment. The Government may make payment by EFT through the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.
- (d) Suspension of payment.
- (1) Notwithstanding the provisions of any other clause of this contract, the Government is not required to make any payment under this contract until after receipt, by the designated payment office, of the correct EFT payment information from the Contractor. Until receipt of the correct EFT information, any invoice or contract financing request shall be deemed not to be a valid invoice.
- (2) If the EFT information changes after submission of correct EFT information, the Government shall begin using the changed EFT information no later than the 30 days after its receipt by the designated office to the extent payment is made by EFT. However, the Contractor may request that no further payments be made until the changed EFT information is implemented by the payment office.
- (e) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government failed to use the Contractor provided EFT information in the correct manner, the Government remains responsible for--
- (i) Making a correct payment; and
- (ii) Recovering any erroneously directed funds.

- (2) If an uncompleted or erroneous transfer occurs because Contractor's EFT information was incorrect at the time of Government release or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and
- (i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or
- (ii) If the funds remain under the control of the payment office, the Government shall not make payment and the provisions of paragraph (d) shall apply.
- (f) EFT and assignment of claims. If the contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the contractor shall require as a condition of any such assignment that the assignee shall provide the EFT information required by paragraph (i) of this clause to the designated office and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the contractor. EFT information that shows the ultimate recipient of the transfer to be other than the contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of Paragraph (d) of this clause.
- (g) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information provided by the contractor s financial agent.
- (h) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address in the contract.
- (i) EFT Information. The contractor shall provide the following information to the designated payment office. The contractor may supply this data for this or multiple contracts (see paragraph (b) of this clause). The Contractor shall designate a single financial agent per contract capable of receiving and processing the EFT information using the EFT methods described in paragraph (c) of this clause. The information required is as follows:
- (1) The contract number;
- (2) The contractor s name and remittance address as stated in the contract(s);
- (3) The signature (manual or electronic, as appropriate), title, and telephone number of the contractor s official authorized to provide this information;
- (4) The name, address, and 9 digit Routing Transit Number of the contractor's financial agent; and
- (5) The contractor's account number and the type of account (checking, saving or lockbox).
- (j) The Contractor shall send all EFT information, and any changes to EFT information to the office designated in paragraph (k) of this clause. The Contractor shall not send EFT information to the payment office, or any other office than that designated in paragraph (k). The Government need not use any EFT information sent to any office other than that designated in paragraph (k).
- (k) Designated office:

Name: Architect of the Capital Accounting Division Mailing Address: 2nd and D Streets SW Ford House Office Building Washington, DC 20515

Telephone: (202) 226-2552 Facsimile: (202) 225-7321

(End of clause)

Discounts (Aug 2004)

- (a) Discounts for prompt payment will not be considered in the evaluation of offers. However, any offered discount will form a part of the award, and will be taken if payment is made within the discount period indicated in the offer by the offeror. As an alternative to offering a prompt payment discount in conjunction with the offer, offerors awarded contracts may include prompt payment discounts on individual invoices.
- (b) In connection with any discount offered for prompt payment, time shall be computed from the date of the invoice. If the Contractor has not placed a date on the invoice, the due date shall be calculated from the date the designated billing office receives a proper invoice, provided the agency annotates such invoice with the date of receipt at the time of receipt. For the purpose of computing the discount earned, payment shall be considered to have been made on the date that appears on the payment check or, for an electronic funds transfer, the specified payment date. When the discount date falls on a Saturday, Sunday, or legal holiday and, for work performed in the District of Columbia, Presidential Inauguration Day, when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day.

(End of clause)

#### AOC52.232-12

Assignment - Supplement (Sep 2004)

Neither the contract nor any interest therein shall be assigned. However, moneys due or to become due under the contract may be assigned in accordance with the provisions of FAR clause 52.232-23 (ASSIGNMENT OF CLAIMS) as incorporated by reference in Section I.

(End of clause)

#### AOC52.233-1

Disputes (Mar 2008)

- (a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613) and as modified by Section 1501 of Title I of Division H of the Consolidated Appropriations Act, 2008, Pub. L. 110-161. (31 U.S.C. 702 NOTE).
- (b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.
- (c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$50,000 is not a claim under the Act until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- (d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer. For the purposes of this clause, all final decisions shall be rendered by the Architect of the Capitol's Director or Deputy Director, Procurement Division.
- (2)(i) The Contractor shall provide the certification specified in paragraph (d)(2)(iii) of this clause when submitting any claim exceeding \$50,000.
- (ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.
- (iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor."
- (3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.
- (e) For Contractor claims of \$50,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$50,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

- (f) The Contracting Officer s decision shall be final unless the Contractor appeals, within ninety days of receipt of a Contracting Officer s decision, to the Government Accountability Office Contract Appeals Board, 441 G Street NW, Room 7182, Washington, DC 20548; facsimile 202-512-9749 or e-mail CAB@gao.gov.
- (g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the offer.
- (h) The Government shall pay interest on the amount found due and unpaid from (1) the date that the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.
- (i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

#### AOC52.233-2

Claims for Equitable Adjustments - Waiver and Release of Claims (Jun 2004)

- (a) Whenever the Contractor submits a claim for equitable adjustment under any paragraph of this contract which provides for equitable adjustment of the contract, such claim shall include all types of adjustments in the total amounts to which the paragraph entitles the Contractor, including but not limited to adjustments arising out of delays or disruptions or both caused by such change. Except as the parties may otherwise expressly agree, the Contractor shall be deemed to have waived (1) any adjustments to which it otherwise might be entitled under the paragraph where such claims fail to request such adjustments, and (2) any increase in the amount of equitable adjustments additional to those requested in its claim.
- (b) Further, the Contractor agrees that, if required by the Contracting Officer, he will execute a release, in form and substance satisfactory to the Contracting Officer, as part of the supplemental agreement setting forth the aforesaid equitable adjustment, and that such release shall discharge the Government, its officers, agents and employees, from any further claims, including but not limited to further claims arising out of delays or disruptions or both, caused by the aforesaid change.

(End of clause)

#### AOC52.233-4

Damages for Delay (Nov 2004)

- (a) The Architect shall not be obligated or liable to the Contractor for, and the Contractor hereby expressly waives any claims against the Architect on account of, any damages, costs, or expenses, of any nature whatsoever, which the Contractor or his subcontractors at any tier may incur as a result of delays, interferences, disruptions, suspensions, changes in sequence or the like arising from or out of any act or omission of the Architect, it being understood and agreed that the Contractor's sole and exclusive remedy in such event shall be an extension of the contract time, but only in accordance with the provisions of the Contract Documents.
- (b) To the extent that any other provision of this contract is inconsistent with the provisions of this article such other sections will be superseded hereby with respect to the issue of delay damages.

(End of clause)

#### AOC52.245-1

Inventory Control and Indemnification of Property (Jun 2004)

- (a) The Contractor shall be liable for the return of the articles picked-up for service under this contract, in accordance with the count as reflected on the "INVENTORY CONTROL VOUCHER" (ICV); see sample attached in Section J. A separate ICV will be completed for each pick-up and verified against the ICV at the time of delivery.
- (b) Two copies of each verified ICV shall be given to the Contractor's representative at the time of delivery; one of which shall be submitted with the Contractor's payment invoice. Failure of the Contractor's representative to verify, by signature on the ICV, any of the ICV totals will be at the Contractor's own risk for purposes of determining any loss of, or damage to, the articles to be serviced

under this contract.

- (c) The Contractor shall indemnify the Government for any property delivered to the Contractor for servicing under this contract which is lost, or which is damaged and, in the opinion of the Contracting Officer, cannot be repaired satisfactorily. In either of these events, the Contractor shall pay to the Government the value thereof in accordance with Federal Supply Schedule price lists. If the property is not on these price lists, the Contracting Officer shall determine a fair and just price. Credit shall be allowed for any depreciation in the value of the property at the time of loss or damage, and the parties hereto shall determine the amount of the allowable credit. If the parties fail to agree upon the value of the property, or fail to agree on the amount of credit due, the dispute shall be determined as provided in AOC52.233-1, Disputes.
- (d) The payment of the lost property will be applied as a credit on the current monthly invoice at the time the amount of the allowable credit is agreed upon by the Contracting Officer and the Contractor.
- (e) In case of damage to any property which the Contracting Officer and the Contractor agree can be satisfactorily repaired, the Contractor shall repair the property at their own expense in a manner satisfactory to the Contracting Officer.

(End of clause)

#### 52.252-2

#### 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

www.gsa.gov or www.arnet.gov

(End of clause)

Clauses By Reference

Clause	Title	Date
52.202-1	Definitions	07/19/2004
52.203-3	Gratuities	11/08/2006
52.203-5	Covenant Against Contingent Fees	11/08/2006
52.203-6	Restrictions On Subcontractor Sales To The Government	11/08/2006
52.215-2	Audit and RecordsNegotiation	11/08/2006
52.215-8	Order of PrecedenceUniform Contract Format	11/08/2006
52.222-26	Equal Opportunity	03/22/2007
52.222-35	Equal Opportunity For Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans	11/08/2006
52.222-36	Affirmative Action For Workers With Disabilities	11/08/2006
52.222-37	Employment Reports On Special Disabled Veterans, Veterans Of The Vietnam Era, and Other Eligible Veterans	11/08/2006
52.222-41	Service Contract Act of 1965 (Nov 2007).	11/07/2007
52.222-43	Fair Labor Standards Act And Service Contract Act - Price Adjustment (Multiple Year And Option)	11/22/2006

Clause	Title	Date
52.222-44	Fair Labor Standards And Service Contract Act - Price Adjustment	11/08/2006
52.222-50	Combating Trafficking in Persons (Aug 2007)	08/17/2007
52.223-2	52.223-2 Affirmative Procurement of Biobased Products Under Service and Construction Contracts (Dec 2007)	12/07/2007
52.223-6	Drug Free Workplace	11/08/2006
52.229-3	Federal, State And Local Taxes	11/08/2006
52.232-11	Extras	11/08/2006
52.232-23	Assignment Of Claims	11/08/2006
52.237-2	Protection Of Government Buildings, Equipment, And Vegetation	11/08/2006
52.242-13	Bankruptcy	11/08/2006
52.243-1	ChangesFixed Price	11/08/2006
52.245-2	Government Property Installation Operation Services	05/18/2007
52.249-2	Termination For Convenience Of The Government (Fixed-Price)	09/01/1996
52.249-8	Default (Fixed-Price Supply & Service)	11/08/2006

#### Section J - List of Attachments

A. Electrical PM Specification (12/2007)

- B. Supplies or Services and Prices/Costs
- C. Wage Determination 05-2103 (Rev. -4) 07-10-2007
- D. Past Performance Questionnaire 3 Pages
- E. ACH Vendor/Miscellaneous Payment Enrollment Form (2/2003)
- F. Request for Check of Criminal History Records (4-2004)

#### Section K - Representations, Certifications and Other Statements of Offerors

#### 52.203-2

Certificate of Independent Price Determination (Apr 1985)

- (a) The offeror certifies that--
- (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to--
- (i) Those prices;
- (ii) The intention to submit an offer; or
- (iii) The methods or factors used to calculate the prices offered.
- (2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and
- (3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.
- (b) Each signature on the offer is considered to be a certification by the signatory that the signatory-
- (1) Is the person in the offeror's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this provision; or
- (2)(i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this provision [insert full name of person(s) in the offeror s organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror s organization];
- (ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) of this provision have not participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this provision; and
- (iii) As an agent, has not personally participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this provision.
- (c) If the offeror deletes or modifies paragraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of provision)

#### 52.204-3

Taxpayer Identification (Oct 1998)

- (a) Definitions.
- "Common parent," as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.
- "Taxpayer Identification Number (TIN)," as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.
- (b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal

Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect an with the Government (31 U.S.C. 7701(c)(3)). If the resulti FAR 4.904, the TIN provided hereunder may be matched	ing contract is	subject to the pa	yment reporting requ	uirements des	elationship scribed in
(d) Taxpayer Identification Number (TIN).					
TIN:		3 B			
TIN has been applied for.					
TIN is not required because:					
Offeror is a nonresident alien, foreign corporation, or for conduct of a trade or business in the United States and document United States;	oreign partners es not have an	hip that does not office or place o	have income effecti f business or a fiscal	vely connect paying agen	ed with the t in the
_Offeror is an agency or instrumentality of a foreign gov	ernment;	The Charles	62		
_Offeror is an agency or instrumentality of the Federal G	Government.			4	
(e) Type of organization.		#8 @			
Sole proprietorship;				11	
Partnership;					
Corporate entity (not tax-exempt);					
Corporate entity (tax-exempt);	¥				
Government entity (Federal, State, or local);					
Foreign government;			88 _ M		
_International organization per 26 CFR 1.6049-4;					
Other					
(f) Common parent.					
Offeror is not owned or controlled by a common parent	as defined in p	oaragraph (a) of	this provision.		
Name and TIN of common parent:					
Name					
TIN					
(End of provision)					
52.209-5					
Certification Regarding Debarment, Suspension, Proposed	d Debarment, a	nd Other Respor	nsibility Matters (De	c 2001)	
(a)(1) The Offeror certifies, to the best of its knowledge ar	nd belief, that				
(i) The Offeror and/or any of its Principals					
(A) Are are not presently debarred, suspended, prop Federal agency;	osed for debar	ment, or declared	d ineligible for the a	ward of contr	acts by any
(B) Have have not, within a three-year period preced	ding this offer.	been convicted	of or had a civil jude	ment rendere	ed against

them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

- (C) Are \_\_ are not \_\_ presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.
- (ii) The Offeror has \_\_ has not \_\_, within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.
- (2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

- (b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.
- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

#### 52.223-1

Biobased Product Certification (Dec 2007)

As required by the Farm Security and Rural Investment Act of 2002 and the Energy Policy Act of 2005 (7 U.S.C. 8102(c)(3)), the offeror certifies, by signing this offer, that biobased products (within categories of products listed by the United States Department of Agriculture in 7 CFR part 2902, subpart B) to be used or delivered in the performance of the contract, other than biobased products that are not purchased by the offeror as a direct result of this contract, will comply with the applicable specifications or other contractual requirements.

(End of provision)

#### AOC52.204-2

Data Universal Numbering System (Duns) Number (Jun 2004)

- (a) The offeror shall enter, in the space provided below, the DUNS number that identifies the offeror s name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet Information Services.
- (b) If the offeror does not have a DUNS number, it should contract Dun and Bradstreet directly to obtain one. A DUNS number will be provided immediately by telephone at no charge to the offeror. For information on obtaining a DUNS number, the offeror, if located within the United States, should call Dun and Bradstreet at 1-800-333-0505. The offeror should be prepared to provide the following information:
- (1) Company name,
- (2) Company address;
- (3) Company telephone number;

4) Line of business;					
5) Chief executive officer/key manager;					
6) Date the company was started;					
7) Number of people employed by the com	ipany; and				
8) Company affiliation.					
c) Offerors located outside the United State Services office from the Internet home page center, it may send an e-mail to Dun and Br	at http://www.custome	erservice@dnb.con	ber of the local Don. If an offeror is t	in and Bradstree inable to locate a	et Information a local service
d) Enter DUNS number:					
End of provision)					
AOC52.204-3	12		11		
Representations and Certifications (Nov 200	04)				
The offeror shall properly execute and subm n spaces provided as applicable.	nit with its offer the Rep	presentations and C	Certifications conta	ained herein. Ins	ert information
End of provision)					
AOC52.215-8					
Authorized Negotiators (Jun 2004)					
The offeror represents that following person Request for Proposal:	ns are authorized to neg	otiate on its behalf	with the Governn	nent in connection	on with this
Name:	Title:	0	14		
Celephone:	E-Mail:	W-100-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-			
2	60 E4				
Name:					
Celephone:	E-Mail:	9.892-10.00			
Name:	Title:				22
Celephone:					
End of provision)		54 g			
AOC52.219-2					
Small Business Representations and Certific	cations (Nov 2007)	To the state of th	•		
a) If this procurement exceeds \$100,000 the 21122 and the small business size standard equirement is for manufacturing or trade) o	l is Not to exceed 4 mill	lion megawatt hour	rs for the precedin	g fiscal year (if	this
b) The Architect of the Capitol maintains in order to monitor the success of our efforts to afferor shall complete the information regard	improve contracting o	pportunities in the	small business co		

(c) Definitions. As used in this provision -"Small business" means a business concern that is organized for profit, has a place of business in the United States, and does not

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exceed the size standard for its industry. It may be a sole proprietorship, partnership, corporation, or any other legal entity. "Service-disabled veteran-owned small business concern" means a small business concern (1) not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and (2) the management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

"Veteran-owned small business concern" means a small business concern (1) not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and (2) the management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern (1) that is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and (2) whose management and daily business operations are controlled by one or more women.

"Large business concern" is an entity that is organized for profit, has a place of business in the United States, and exceeds the size standard for its industry.

"Nonprofit organization" is an entity that is not organized for profit, e.g., the American Red Cross, universities, and foundations. "Foreign contractor" is an entity organized for profit that is not in the United States.

- (d) Small disadvantaged business, women-owned small business, veteran-owned small business, service-disabled veteran-owned small business, and HUBZone small business concerns are subcategories of small business. Small disadvanted business and HUBZone small business concerns require certification by the U.S. Small Business Administration. Additional information is available at http://www.sba.gov.
- (e) For entities organized for profit, the size standards for each industry can be found at http://www.sba.gov/gopher/Government-Contracting/Size/. A business is large if the number of employees or revenue amount exceeds that shown in the applicable industry.
- (f) Indicate below the information that best describes your organization and check all categories that apply. For example, if your organization is women-owned and veteran-owned small business, then check "Small Business", Women-owned small business", and "Veteran-owned small business".

Nonprofit organization (do not check any other box).	
Large business (do not check any other box).	
Foreign contractor (do not check any other box).	
State/local/Federal government agency (do not check any other box).	
Small business (see 13 CFR Part 121).	
HUBZone small business (see 13 CFR Part 126).	
Small disadvantaged business (see 13 CFR 124.1002).	
Service-disabled veteran-owned small business (see 38 U.S.C. 101(2) and 38 U.S.C. 101(16)	1).
Veteran-owned small business (see 38 U.S.C. 101(2)).	ye.
Women-owned small business.	
30.2	

(End of provision).

### Section L - Instructions, Conditions and Notices to Offerors

### 52.216-1

Type of Contract (Apr 1984)

The Government contemplates award of a Firm Fixed Price contract resulting from this solicitation.

(End of provision)

#### AOC52.204-5

Registration In The Central Contractor Registration (CCR) (Nov 2007)

- (a) The Architect of the Capitol anticipates that in the future the agency's contractors may have to register in the CCR database. This is the primary vendor database for the Executive Branch of the U.S. Federal Government. CCR collects, validates, stores, and disseminates data in support of agency acquisition missions.
- (b) CCR requires vendors to complete a one-time registration to provide basic information relevant to procurement and financial transactions. Vendors must update or renew their registration at least once per year to maintain an active status. CCR validates the vendor information and electronically shares the secure and encrypted data with the Federal agencies' finance offices to facilitate paperless payments through electronic funds transfer (EFT).
- (c) The AOC is now encouraging all vendors to register in the CCR if they have not already done so. Vendors can register on line at http://ccr.gov. This internet site contains all pertinent information for registrration as well as provides contact points for help when registering.

(End of provision)

#### AOC52.206-1

Procurement Authority for the Architect of the Capitol (Sep 2007)

The authority for all purchase orders and contracts awarded by the Architect of the Capitol is 41 U.S.C. 5, 41 U.S.C. 6a-1, and 41 U.S.C. 6a-2, as amended by Public Laws 107-68, 108-7, and 108-83.

(End of Provision)

#### AOC52.215-1

Instructions to Offerors (Jul 2007)

(a) Definitions. As used in this provision --

Proposal modification is a change made to a proposal before the solicitation s closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

Proposal revision is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

Time, if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays, including Presidential Inauguration Day. However, if the last day falls on a Saturday, Sunday, or legal holiday, including Presidential Inauguration Day, then the period shall include the next working day.

- (b) Offerors are expected to examine the entire solicitation and all instructions. Failure to do so will be at the offeror s risk. Each offeror shall furnish the information required by the solicitation. The offeror will be held responsible for full knowledge of all information contained therein.
- (c) Packaging, transmission, and tracking of proposals. (1) Proposals, modifications, and revisions shall be enclosed, in the quantities

specified elsewhere in this solicitation, in sealed envelopes. With each copy of the form entitled, "SOLICITATION, OFFER, AND AWARD", the offeror shall enclose the completed Schedule page; offer guarantee, if required; and Representations and Certifications. Address envelopes to: Architect of the Capitol, Procurement Division, Ford House Office Building, Attn: John Friedhoff, Room H2-263 Bid Room, Second and D Streets, S.W., Washington, DC 20515. Offeror shall write Bid Documents Enclosed, H2-263 Bid Room, and write the solicitation number, time and date for receipt of offers on the exterior of the package on the same side as the address. Telegraphic or facsimile proposals and modifications will not be considered.

- (2) Current security requirements established by the U.S. Capitol Police to screen mail being delivered to the U.S. Capitol Complex of buildings preclude the use of U.S. Postal Service by offerors to deliver their proposals submitted in response to this solicitation. In addition, because all packages must be screened for security purposes at a central location prior to their delivery, the Architect of the Capitol cannot accept packages containing offers hand carried directly to the Bid Room address within the Ford House Office Building, or any other location in the U.S. Capitol Complex of buildings. See Notice for Delivery on the front of the solicitation.
- (3) To assist in tracking of proposals, offerors are requested to fax a copy of their signed Solicitation, Offer and Award form as well as a copy of the FEDEX or UPS receipt to John Friedhoff to [(202) 226-4525 at the time of the issuance of their proposal.
- (4) The only acceptable method by which offerors can deliver their responses to this solicitation shall be via Federal Express (FEDEX) or United Parcel Service (UPS). Offers submitted via any other method will be rejected. OFFERORS DO NOT MAIL YOUR OFFER BY REGULAR U.S. MAIL. See notice attached to this solicitation for special instructions.
- (d) Submission, modification, revision, and withdrawal of proposals. (1) Offerors are responsible for submitting proposals and any modifications or revisions so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m. local time, for the designated Government office on the date that the proposal or revision is due.
- (2) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is late and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would no unduly delay the acquisition, and-
- (i) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals;
- (ii) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of proposals and was under the Government's control prior to the time set for receipt of proposals; or
- (iii) It is the only proposal received.
- (3) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.
- (4) Acceptable evidence to establish the date of receipt at the Government installation includes the time/date stamp of that installation on the offer wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.
- (5) If an emergency or unanticipated event interrupts normal Government processes so that offers cannot be received at the Government office designated for receipt of proposals by the exact time specified in the solicitation and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.
- (6) Proposals may be withdrawn by written notice received at any time before award. Proposals may be withdrawn in person by an offeror or an authorized representative if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

(End of provision)

#### AOC52.215-2

Interpretations and Amendments (Jun 2004)

- (a) Any prospective offeror desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing no later than fourteen calendar days prior to the date established for receipt of offers. Oral explanations or instructions given before the award of a contract will not be binding.
- (b) Prospective offerors shall request the Contracting Officer, in writing, via FAX or e-mail for an interpretation or correction of any ambiguity, inconsistency, or error in the contract documents which they may discover or which should have been discovered by a

reasonably prudent offeror. Such requests or objections to materials or methods of construction shown or specified shall be directed to the attention of the Contracting Officer at least fifteen (15) calendar days prior to the date specified for receipt of proposals. Written requests shall be transmitted via e-mail to jfriedho@aoc.gov or via facsimile to (866)837-6818.

- (c) Any interpretations or corrections, as well as any additional modifications the Contracting Officer may desire to include, will be in the form of amendments, in writing, which will be sent on the same date to all offerors if that information is necessary in submitting offers or if the lack of it would be prejudicial to other prospective offerors and shall become a part of any subsequent contract. The Contracting Officer reserves the right to answer only such questions as have, in his opinion, a definite bearing upon the proposals to be submitted.
- (1) Offerors shall acknowledge the receipt of all amendments to the solicitation by:
- (i) Signing and returning the amendment;
- (ii) Identifying the amendment number and date in the space provided for this purpose on the form for submitting a offer;
- (iii) Letter or telegram; or
- (iv) Facsimile, if facsimile offers are authorized in the solicitation.
- (2) The Government must receive the acknowledgment by the time and at the place specified for receipt of offers.
- (d) Requests for oral interpretations or any other interpretations not made by amendments will not be accepted, and any information that may possibly be gained by offerors in that manner is gratuitous and not binding.
- (e) If this solicitation is amended, all terms and conditions that are not amended remain unchanged.

(End of provision)

#### AOC52.215-3

Restriction on Disclosure and Use of Data (Jun 2004)

Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall

(a) Mark the title page with the following legend:

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed—in whole or in part—for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of—or in connection with—the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets (insert numbers or other identification of sheets); and

(b) Mark each sheet of data it wishes to restrict with the following legend:
Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

(End of provision)

#### AOC52.215-6

Preparation of Proposals (May 2007)

- (a) Offerors are expected to examine the drawings, if any, specifications, Schedule, and all instructions. Failure to do so will be at the Offerors risk.
- (b) Each offeror shall furnish the information required by the solicitation. The offerors shall sign the offer on Page 1 (SOLICITATION, OFFER AND AWARD) in block 18 and return Sections A, B, and K of this solicitation package. Erasures or other changes must be initialed by the person signing the offer. Offers signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.
- (c) For each item offered, offers shall
- (1) Show the unit price, if required, including, unless otherwise specified, packaging, packing, and preservation; and

- (2) Enter the extended price for the quantity of each item offer in the "Amount" column of the Schedule.
- (d) In case of discrepancy between a unit price and an extended price, the unit price will be presumed to be correct, subject, however, to correction to the same extent and in the same manner as any other mistake.
- (e) Offers for supplies or services other than those specified will not be considered unless authorized by the solicitation.

(End of provision)

#### AOC52.215-9

Failure to Submit Offer (Jun 2004)

Recipients of this solicitation not responding with a proposal should not return this solicitation, unless it specifies otherwise. Instead, they should advise the issuing office by letter, postcard, or established electronic commerce methods, whether they want to receive future solicitations for similar requirements. If a recipient does not submit a proposal and does not notify the issuing office that future solicitations are desired, the recipient s name will be removed from the applicable mailing list.

(End of provision)

#### AOC52.236-13

Visit to the Site of the Work - Construction (Jun 2004)

- (a) It is strongly recommended that all prospective offerors visit the site where the work is to be performed, compare the work requirements with existing conditions, verify dimensions, if necessary, and fully inform themselves regarding the nature and scope of the proposed work and the conditions under which it will be conducted. Offerors shall also inform themselves regarding other work, if any, being done or to be done by or for the United States government, the District of Columbia government and utility companies, by contract or otherwise, where such work may affect or be affected by the operations under the contract. Failure to take these precautions will in no way relieve the successful offeror from his obligation to furnish all materials, services, labor, and any other requirements necessary to complete the work satisfactorily under the conditions established by the contract documents and without additional expense to the Government.u
- (b) A pre-proposal meeting will be conducted at the Capitol Power Plant Washington, D.C. for all prospective offerors on May 22, 2008 at 10:00 AM, local time.
- (c) The Architect will conduct one field inspection of the work immediately following the pre-proposal meeting. Those intending to participate shall meet at the address above. Information concerning the meeting may be obtained by telephoning John Friedhoff at (202)226-4525.
- (d) Offerors are encouraged to submit all questions in writing at least five (5) working days prior to the conference. Questions will be considered at any time prior to or during the conference; however, offerors will be asked to confirm verbal questions in writing. Subsequent to the conference, an amendment to the solicitation containing an abstract of the questions and answers, and a list of attendees, will be disseminated.
- (e) Offerors are cautioned that, notwithstanding any remarks or clarifications given at any site visit, the pre-proposal conference or field inspection, all terms and conditions of the solicitation remain unchanged unless they are changed by amendment to the solicitation. If the answers to conference questions, or any solicitation amendment, create ambiguities, it is the responsibility of the offeror to seek clarification prior to submitting a offer.

(End of provision)

# NOTICE

# NO HAND CARRIED BIDS! NO MAILED BIDS!

Current security requirements established by the U.S. Capitol Police to screen mail being delivered to the U.S. Capitol Complex of buildings preclude the use of U.S. Postal Service by offerors to deliver their proposals submitted in response to this solicitation. In addition, because all packages must be screened for security purposes at a central location prior to their delivery, the Architect of the Capitol cannot accept packages containing offers handcarried directly to the Bid Room address within the Ford House Office Building, as specified elsewhere in this solicitation, or at any other location in the U.S. Capitol Complex of buildings.

Due to these unusual circumstances the Procurement Division for the Architect of the Capitol will only accept offers/proposals via UPS or FEDEX at the address noted below. All handcarried offers/proposals will be rejected. Any attempt to hand carry an offer/proposal to any location in the U.S. Capitol Complex of buildings will be refused. See Section L for submission of offers. Offerors are advised when sending proposals via FEDEX or UPS <u>not</u> to use same day delivery. FEDEX/UPS often subcontract out the delivery for sameday service. It is necessary for delivery personnel to arrive in a FEDEX/UPS truck and be in a uniform recognized as FEDEX/UPS at the delivery point. Offerors are encouraged to determine who will be making the delivery when making arrangements with FEDEX/UPS.

All UPS and FEDEX deliveries are to be made to the Ford House Office Building at the following address:

Architect of the Capitol Procurement Division Ford House Office Building Attn: John Friedhoff Room H2-263 Second and "D" Streets, S.W. Washington, DC 20515

# NOTICE

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#### AOC52.215-4

#### Contract Award (Jun 2004)

- (a) The Government will evaluate offers in response to this solicitation without discussions and will award a contract to the responsible offeror whose offer, conforming to the solicitation, will be most advantageous to the Government considering only price and the price-related factors specified elsewhere in the solicitation. Therefore, the offeror s in itial proposal should contain the offeror s best terms from a price standpoint. The Government reserves the right to conduct discussion
- (b) The Government may
- (1) Reject any or all offers;
- (2) Accept other than the lowest offer; and
- (3) Waive informalities or minor irregularities in offers received.
- (c) The Government may accept any item or combination of items, unless doing so is precluced by a restrictive limitation in the solicitation or the offer.
- (d) A written award or acceptance of offer mailed or otherwise furnished to the successful of error within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. I efore the offer's specified expiration time, the Government may accept an offer (or part of an offer as provided in Paragraph (c) of this clause), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. I egotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.

(e) Neither financial data submitted with an offer, nor representations concerning facilities or financing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, i accurate, or not current.

(f) The Government may determine that an offer is unacceptable if the prices proposed are m terially unbalanced between line items or sub line items. Unbalanced pricing exists when, despite an acceptable total evaluated price the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable sk to the Government.

(End of provision)

### SECTION M

#### EVALUATION FACTORS FOR AWARD

# M.1 PROPOSAL EVALUATION CRITERIA (AOC) (JUN 2003)

.1 The evaluation criteria to be used by the Contracting Officer for the selection of a contractor to perform the work specified are defined below. The criteria are divided into technical and price categories which consist of subsections corresponding to those in the article entitled INSTRUCTIONS FOR PREPARING THE TECHNICAL PROPOSAL and the article entitled INSTRUCTIONS FOR PI EPARING THE PRICE PROPOSAL in Section L. The technical criteria are considered by the Architect to be generally more important

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than price criteria. However, as the difference in technical merit between the p oposals becomes less significant, the relative importance of the price will increase.

.2 TECHNICAL CRITERIA. Each offeror s proposal will be evaluated in accordance with the technical criteria listed below to determine whether it is responsive to the requirements of the R P and are therefore acceptable. Technical criteria are listed below in descending order of importance:

### .1 Factor 1 Quality Control -

1. The Offeror's Quality Control will be evaluated to determine if the procedures which address Welding Procedure Specifications and Procedure Qualification Records for each repair vill fulfill the requirements and objectives under this solicitation. As well as How their Plan of Accomplishment will fullfill the requirements under this solicitation.

### .2 Factor 2 - Corporate Experience (General Contractor/Major Subcontractor). -

- 1. The Offeror s and the proposed subcontractors experience will be evaluated o determine the extent of successful completion of projects, performed within the past three years, with minimum of three successfully completed projects of similar scope, size and complexity to the requirements of this project (Services for preventative maintenance and repairs).
- 2. The experience with the subcontractors and related projects will be evaluate for the extent of successful completion of projects, performed within the past three years, of similar scope, size and complexity to the requirements of this project (Services for preventative maintenance and repairs.

### .3 Factor 3 - Key Personnel (Project Manager and Field Technicians) -

- 1. The Government will evaluate the qualifications and experience on the resultes of the Offeror's key personnel, including Project Manager and field technicians.
- 2. The purpose of the key personnel information is to evaluate the Offeror s ab ity to provide quality personnel who have the necessary qualifications and experience, in terms of training, bac ground, and recent technical experience, to successfully perform the requirements of this solicitation.

### .4 Factor 4 - Past Performance (General Contractor/Major Subcontractor ) -

- 1. The Offeror s and the proposed subcontractors past performance will be evaluated to determine the extent of successful completion of projects, performed within the past three years, of sin ilar scope, size and complexity to the requirements of this project (Services for preventive maintenance and repairs).
- 2. The AOC will use references provided (Past Performance Questionnaire) in his factor to verify the offeror s and proposed subcontractors past performance relative to conforming to contrate trequirements, meeting prescribed schedules, and history of reasonable and cooperative behavior. Time liness and degree of client satisfaction for each project will be taken into consideration. Proposed subcont actors will be evaluated to determine if their qualifications are sufficient to carry out their portion of the work as described in the specification. The AOC may use other references/information to verify past performance.
- .3 PRICE CRITERIA. The Government will evaluate the price proposals of all "irms found technically qualified. Price criterion measure not only actual dollars but also analyze reaso ableness of the Offeror's proposed price and its position in the range of all prices.

Contract Award - Source Selection Procedures (Jun 2004)

- (a) The Government will award a contract resulting from this solicitation to the responsible of error whose offer conforming to the solicitation will be most advantageous to the Government, cost or price and other factors, spe ified elsewhere in this solicitation, considered.
- (b) The Government may
- (1) Reject any or all offers if such action is in the public interest;
- (2) Accept other than the lowest offer; and
- (3) Waive informalities and minor irregularities in offers received.
- (c) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror s initial proposal should contain the offeror's best terms from a price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Office relater determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in he competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit he number of proposals in the competitive range to the greatest number that will permit an efficient competition among the roost highly rated proposals.

- (d) The Government may accept any item or combination of items, unless doing so is preclude 1 by a restrictive limitation in the solicitation or the offer.
- (e) A written award or acceptance of offer mailed or otherwise furnished to the successful offer or within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. B fore the offer's specified expiration time, the Government may accept an offer (or part of an offer as provided in Paragraph (d) of his provision), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. N gotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.

(f) Neither financial data submitted with an offer, nor representations concerning facilities or f nancing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, in ccurate, or not current.

(g) The Government may determine that an offer is unacceptable if the prices proposed are magrially unbalanced between line items or sub line items. Unbalanced pricing exists when, despite an acceptable total evaluated price, he price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable ri k to the Government.

(End of provision)

#### 52.252-1 Sec. M

### 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same fc ce and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror i cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or o fer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically in this/these address(es):

www.gsa.gov or www.arnet.gov

(End of provision)

Clauses By Reference

Clause	Title	Date
52.217-5	Evaluation Of Options	11/08/2006

### Attachment A

### ELECTRICAL PM SPECIFICATION

### A SCOPE AND DESCRIPTION OF WORK

The contractor will provide all services and materials as required to perform annual, preventative maintenance for equipment listed on the attached pricing worksheet an in accordance with NETA MTS-2005. The following is an outline of the services required to perform this work. The section numbers referenced in the sections below are from NETA MTS-2005:

# Section 7.1 Switchgear and Switchboard Assemblies

# 1. Visual and Mechanical Inspection

- 1. Inspect physical, electrical, and mechanical condition including evidence of moisture or corona.
- 2. Inspect anchorage, alignment, grounding, and required area clearances.
- 3. Clean the unit.
- Verify that fuse and/or circuit breaker sizes and types correspond to drawings and coordination study as well as to the circuit breaker's address for microprocessorcommunication packages.
- 5. Verify that current and voltage transformer ratios correspond to drawings.
- 6. Inspect bolted electrical connections for high resistance. Perform a thermographic survey of the low voltage switchgear while the equipment is on line, and at least 2 weeks prior to the maintenance and test work.
- 7. Confirm correct operation and sequencing of electrical and mechanical interlock systems.
  - 1. Attempt closure on locked-open devices. Attempt to open locked-closed devices.
  - 2. Make key exchange with all devices included in the interlock scheme as applicable.
- 8. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 9. Verify correct barrier and shutter installation and operation.
- 10. Exercise all active components.
- 11. Inspect mechanical indicating devices for correct operation.

- 12. Verify that filters are in place and/or vents are clear.
- 13. Inspect control power transformers.
  - 1. Inspect for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring, and overall general condition.
  - 2. Verify that primary and secondary fuse ratings or circuit breakers match drawings.
  - Verify correct functioning of drawout disconnecting and grounding contacts and interlocks.
- Perform as-left tests.

### 2. Electrical Tests

- 1. Perform resistance measurements through bolted electrical connections with a low-resistance ohmmeter in accordance with Section 7.1.1, if applicable.
- 2. Perform insulation—resistance tests for one minute on each bus section, phase-to-phase and phase-to-ground. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NETA MTS 2005, Table 100.1
- 3. Control Power Transformers
  - 1. Perform insulation-resistance tests. Perform measurements from winding-to-winding and each winding-to-ground. Test voltages shall be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NEA MTS 2005, Table 100.1
  - 2. Verify correct function of control transfer relays located in switchgear with multiple power sources.
- 4. Verify operation of switchgear/switchboard heaters and their controller, if applicable.
- 5. Perform lost bus transfer tests if applicable.

### 3. Test Values

### 3.2 Test Values – Electrical

- Insulation-resistance values of bus insulation should be in accordance with manufacturer's
  published data. In the absence of manufacturer's published data, use NEA MTS 2005,
  Table 100.1. Values of insulation resistance less than this table or manufacturer's
  recommendations should be investigated.
- 2. Minimum insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.

- 3. Control Power Transformers
  - 1. Insulation-resistance values of control power transformers should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.5. Values of insulation resistance less than this table or manufacturer's recommendations should be investigated.
  - Control transfer relays should perform as designed.
- 4. Heaters should be operational.

# **Section 7.6.1.2**

# Circuit Breakers, Air, Low-Voltage Power

## Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Verify that all maintenance devices are available for servicing and operating the breaker.
- 4. Prior to cleaning the unit, perform as-found tests, if required.
- Clean the unit.
- 6. Inspect arc chutes.
- 7. Inspect moving and stationary contacts for condition, wear, and alignment.
- 8. Verify that primary and secondary contact wipe and other dimensions vital to satisfactory operation of the breaker are correct.
- 9. Perform all mechanical operator and contact alignment tests on both the breaker and its operating mechanism in accordance with manufacturer's published data.
- 10. Inspect bolted electrical connections for high resistance using one of the following methods:
  - 1. Use of a low-resistance ohmmeter in accordance with Section 7.6.1.2.2.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torquewrench method in accordance with manufacturer's published data or Table 100.12.
  - 3. Perform a thermographic survey in accordance with Section 9.
- 11. Verify cell fit and element alignment.

- 12. Verify racking mechanism operation.
- 13. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 14. Perform as-left tests.
- 15. Record as-found and as-left operation counter readings, if applicable.

### **Electrical Tests**

- 1. Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable, in accordance with Section 7.6.1.2.1.
- Perform insulation-resistance tests for one minute on each pole, phase-to-phase and
  phase-to-ground with the circuit breaker closed, and across each open pole. Apply voltage
  in accordance with manufacturer's published data. In the absence of manufacturer's
  published data, use Table 100.1.
- 3. Perform a contact/pole-resistance test.
- 4. Perform insulation-resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components, follow manufacturer's recommendation.
- 5. Determine long-time pickup and delay by primary current injection.
- 6. Determine short-time pickup and delay by primary current injection.
- 7. Determine ground-fault pickup and delay by primary current injection.
- 8. Determine instantaneous pickup current by primary current injection.
- 9. Test functions of the trip unit by means of secondary injection.
- 10. Perform minimum pickup voltage test on shunt trip and close coils in accordance with Table 100.20.
- 11. Verify operation of charging mechanism.
- 12. Verify correct operation of auxiliary features such as trip and pickup indicators, zone interlocking, electrical close and trip operation, trip-free, antipump function, and trip unit battery condition. Reset all trip logs and indicators.

### **Test Values**

Test Values - Visual and Mechanical

- 1. Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.6.1.2.1.10.1).
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.6.1.2.1.10.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.6.1.2.1.10.3)

### Test Values – Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value.
- Insulation-resistance values of breakers should be in accordance with manufacturer's
  published data. In the absence of manufacturer's published data, use Table 100.1. Values of
  insulation resistance less than this table or manufacturer's recommendations should be
  investigated.
- 3. Microhm or millivolt drop values should not exceed the high levels of the normal range as indicated in the manufacturer's published data. If manufacturer's data is not available, investigate values that deviate from adjacent poles or similar breakers by more than 50 percent of the lowest value.
- 4. Insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.
- 5. Long-time pickup values should be as specified, and the trip characteristic shall not exceed manufacturer's published time-current characteristic tolerance band, including adjustment factors. If manufacturer's curves are not available, trip times shall not exceed the value shown in Table 100.7. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- 6. Short-time pickup values should be as specified, and the trip characteristic should not exceed manufacturer's published time-current tolerance band. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- 7. Ground fault pickup values should be as specified, and the trip characteristic should not exceed manufacturer's published time-current tolerance band. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- 8. Instantaneous pickup values should be within the tolerances of manufacturer's published data. In the absence of manufacturer's published data, refer to Table 100.8. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- Pickup values and trip characteristic should be as specified and within manufacturer's published tolerances. (Circuit breakers exceeding specified trip time shall be tagged defective.)

- 10. Minimum pickup voltage on shunt trip and close coils should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, refer to Table 100.20.
- 11. The charging mechanism should operate in accordance with manufacturer's published data.
- 12. Auxiliary features should operate in accordance with manufacturer's published data.

### **Section 7.6.1.3**

# Circuit Breakers, Air, Medium-Voltage

### Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Verify that all maintenance devices are available for servicing and operating the breaker.
- 4. Prior to cleaning the unit, perform as-found tests, if required.
- Clean the unit.
- 6. Inspect arc chutes.
- 7. Inspect moving and stationary contacts for condition, wear, and alignment.
- 8. If recommended by manufacturer, slow close/open breaker and check for binding, friction, contact alignment, contact sequence, and penetration.
- 9. Perform all mechanical operation tests on the operating mechanism in accordance with manufacturer's published data.
- 10. Inspect bolted electrical connections for high resistance using one of the following methods:
  - 1. Use of a low-resistance ohmmeter in accordance with Section 7.6.1.3.2.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torquewrench method in accordance with manufacturer's published data or Table 100.12.
  - 3. Perform a thermographic survey in accordance with Section 9.
- 11. Verify cell fit and element alignment.
- 12. Verify racking mechanism operation.
- 13. Inspect puffer operation.

- 14. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 15. Perform time-travel analysis.
- 16. Perform as-left tests.
- 17. Record as-found and as-left operation-counter readings.

## **Electrical Tests**

- 1. Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable. See Section 7.6.1.3.1.
- 2. Perform insulation-resistance tests on each pole, phase-to-phase and phase-to-ground with the circuit breaker closed, and across each open pole for one minute. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.1.
- 3. Perform insulation-resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components or control devices that cannot tolerate the applied voltage, follow manufacturer's recommendation.
- 4. Perform a contact/pole-resistance test.
- 5. With the breaker in a test position, perform the following tests:
  - 1. Trip and close breaker with the control switch.
  - 2. Trip breaker by operating each of its protective relays.
  - 3. Verify mechanism charge, trip-free, and antipump functions.
- 6. Perform minimum pickup voltage tests on trip and close coils in accordance with Table 100.20.
- 7. Perform power-factor or dissipation-factor tests with breaker in both the open and closed positions.
- 8. Perform power-factor or dissipation-factor test on each bushing.
- 9. Perform an overpotential test on each phase with the circuit breaker closed and the poles not under test grounded. Test voltage should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.19.
- 10. Verify blowout coil circuit continuity.

- 11. Verify operation of heaters, if applicable.
- 12. Test instrument transformers in accordance with Section 7.10.

### **Test Values**

### Test Values - Visual and Mechanical

- 1. Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.6.1.3.1.10.1)
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.6.1.3.1.10.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.6.1.3.1.10.3)
- 4. Compare travel and velocity values to manufacturer's published data and previous test data. (7.6.1.3.1.15)

### Test Values – Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value.
- 2. Circuit breaker insulation resistance should be in accordance with Table 100.1.
- Insulation-resistance values of circuit breakers should be in accordance with
  manufacturer's published data. In the absence of manufacturer's published data, use Table
  100.1. Values of insulation resistance less than this table or manufacturer's
  recommendations should be investigated.
- 4. Microhm or millivolt drop values shall not exceed the high levels of the normal range as indicated in the manufacturer's published data. If manufacturer's data is not available, investigate values that deviate from adjacent poles or similar breakers by more than 50 percent of the lowest value.
- 5. Breaker mechanism charge, close, open, trip, trip-free, and antipump features shall function as designed.
- 6. Minimum pickup for trip and close coils shall be in accordance with manufacturer's published data. In the absence of manufacturer's data, refer to Table 100.20.
- 7. Power-factor or dissipation-factor values shall be compared with previous test results of similar breakers or manufacturer's published data.

- 8. Power-factor or dissipation-factor and capacitance values should be within ten percent of nameplate rating for bushings. Hot collar tests are evaluated on a milliampere/milliwatt loss basis, and the results should be compared to values of similar bushings.
- If no evidence of distress or insulation failure is observed by the end of the total time of
  voltage application during the overpotential test, the circuit breaker is considered to have
  passed the test.
- 10. The blowout coil circuit should exhibit continuity.
- 11. Heaters should be operational.
- 12. The results of instrument transformer tests shall be in accordance with Section 7.10.

# Relays 5KV & 15KV Sub Stations

# Visual and Mechanical Inspection

- 1. Inspect relays and cases for physical damage.
- 2. Prior to cleaning the unit, perform as-found tests.
- Clean the unit.
- 4. Tighten case connections. Inspect cover for correct gasket seal. Clean cover glass. Inspect shorting hardware, connection paddles, and/or knife switches. Remove any foreign material from the case. Verify target reset.
- 5. Inspect relay for foreign material, particularly in disk slots of the damping and electromagnets. Verify disk clearance. Verify contact clearance and spring bias. Inspect spiral spring convolutions. Inspect disk and contacts for freedom of movement and correct travel. Verify tightness of mounting hardware and connections. Burnish contacts. Inspect bearings and/or pivots.
- 6. Verify that all settings are in accordance with coordination study or setting sheet supplied by owner, if available.
- Perform as-left tests.

### **Electrical Tests**

- 1. Perform insulation-resistance test on each circuit-to-frame. Determine from the manufacturer's published data the allowable procedures for this test for solid-state and microprocessor-based relays.
- 2. Inspect targets and indicators.

- 1. Determine pickup and dropout of electromechanical targets.
- 2. Verify operation of all light-emitting diode indicators.
- 3. Set contrast for liquid-crystal display readouts.

# 3. Functional Operation

- 1. 2/62 Timing Relay
  - 1. Determine time delay.
  - 2. Verify operation of instantaneous contacts.
- 2. 21 Distance Relay
  - 1. Determine maximum reach.
  - 2. Determine maximum torque angle.
  - 3. Determine offset.
  - 4. Plot impedance circle.
- 3. 24 Volts/Hertz Relay
  - 1. Determine pickup frequency at rated voltage.
  - 2. Determine pickup frequency at a second voltage level.
  - 3. Determine time delay.
- 4. 25 Sync Check Relay
  - 1. Determine closing zone at rated voltage.
  - 2. Determine maximum voltage differential that permits closing at zero degrees.
  - 3. Determine live line, live bus, dead line, and dead bus set points.
  - 4. Determine time delay.
  - 5. Verify dead bus/live line, dead line/live bus and dead bus/dead line control functions.

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- 1. 27 Undervoltage Relay
  - 1. Determine dropout voltage.
  - 2. Determine time delay.
  - 3. Determine the time delay at a second point on the timing curve for inverse time relays.
- 2. 32 Directional Power Relay
  - 1. Determine minimum pickup at maximum torque angle.
  - 2. Determine closing zone.
  - 3. Determine maximum torque angle.
  - 4. Determine time delay.
  - 5. Verify the time delay at a second point on the timing curve for inverse time relays.
  - 6. Plot the operating characteristic.
  - 1. Determine positive sequence voltage to close the normally open contact.
  - 2. Determine positive sequence voltage to open the normally closed contact (undervoltage trip).
  - 3. Verify negative sequence trip.
  - 4. Determine time delay to close the normally open contact with sudden application of 120 percent of pickup.
  - 5. Determine time delay to close the normally closed contact upon removal of voltage when previously set to rated system voltage.
- 4. 49R Thermal Replica Relay
  - 1. Determine time delay at 300 percent of setting.
  - 2. Determine a second point on the operating curve.
  - 3. Determine pickup.

### 5.50 Instantaneous Overcurrent Relay

- 1. Determine pickup.
- 2. Determine dropout.
- 6. 51 Time Overcurrent
  - 1. Determine minimum pickup.
  - 2. Determine time delays at two points on the time current curve.
- 7. 59 Overvoltage Relay
  - 1. Determine overvoltage pickup.
  - 2. Determine time delay to close the contact with sudden application of 120 percent of pickup.
- 8. 60 Voltage Balance Relay
  - 1. Determine voltage difference to close the contacts with one source at rated voltage.
- 9. 67 Directional Overcurrent Relay
  - 1. Determine directional unit minimum pickup at maximum torque angle.
  - 2. Determine closing zone.
  - 4. Plot operating characteristics.
  - 5. Determine overcurrent unit pickup.
  - 6. Determine overcurrent unit time delay at two points on the time current curve.
- 10. 81 Frequency Relay
  - 1. Verify frequency set points.
  - 2. Determine time delay.
  - 3. Determine undervoltage cutoff.
- 11. 87 Differential
  - 1. Determine operating unit pickup.
  - 2. Determine the operation of each restraint unit.

- 3. Determine slope.
- 4. Determine harmonic restraint.
- 5. Determine instantaneous pickup.

### 4. Control Verification

- Verify that each of the relay contacts performs its intended function in the control scheme including breaker trip tests, close inhibit tests, 86 lockout tests, and alarm functions.
- 2. For microprocessor-based relays, verify all used inputs, outputs, and internal logic.

### 5. Test Values

- 1. When not otherwise specified, use manufacturer's recommended tolerances.
- 2. When critical test points are specified, the relay should be calibrated to those points even though other test points may be out of tolerance.

# Section 7.9.1

# Protective Relays, Electromechanical and Solid-State

# Visual and Mechanical Inspection

- 1. Inspect relays and cases for physical damage.
- 2. Prior to cleaning the unit, perform as-found tests, if required.
- Clean the unit.
- Relay Case
  - 1. Tighten case connections.
  - 2. Inspect cover for correct gasket seal.
  - 3. Clean cover glass. Inspect shorting hardware, connection paddles, and/or knife switches.
  - 4. Remove any foreign material from the case.
  - 5. Verify target reset
- 5. Relay

- 1. Inspect relay for foreign material, particularly in disk slots of the damping and electromagnets.
- 2. Verify disk clearance. Verify contact clearance and spring bias.
- Inspect spiral spring convolutions. Inspect disk and contacts for freedom of
  movement and correct travel. Verify tightness of mounting hardware and
  connections. Burnish contacts. Inspect bearings and/or pivots.
- 6. Verify that all settings are in accordance with coordination study or setting sheet supplied by owner.
- 7. Perform as-left tests.

### **Electrical Tests**

- 1. Perform insulation-resistance test on each circuit-to-frame. Procedures for performing insulation-resistance tests on solid-state relays should be determined from the relay manufacturer's published data.
- 2. Inspect targets and indicators.
  - 1. Determine pickup and dropout of electromechanical targets.
  - 2. Verify operation of all light-emitting diode indicators.
  - 3. Set contrast for liquid-crystal display readouts.

# **Functional Operation**

- 1. 2/62 Timing Relay
  - 1. Determine time delay.
  - 2. Verify operation of instantaneous contacts.
- 2. 21 Distance Relay
  - 1. Determine maximum reach.
  - 2. Determine maximum torque angle.
  - 3. Determine offset.
  - 4. Plot impedance circle.
- 3. 24 Volts/Hertz Relay
  - 1. Determine pickup frequency at rated voltage.

- 2. Determine pickup frequency at a second voltage level.
- 3. Determine time delay.

# 4. 25 Sync Check Relay

- 1. Determine closing zone at rated voltage.
- 2. Determine maximum voltage differential that permits closing at zero degrees.
- 3. Determine live line, live bus, dead line, and dead bus set points.
- 4. Determine time delay.
- 5. Verify dead bus/live line, dead line/live bus and dead bus/dead line control functions.

# 5. 27 Undervoltage Relay

- 1. Determine dropout voltage.
- 2. Determine time delay.
- 3. Determine the time delay at a second point on the timing curve for inverse time relays.

## 6. 32 Directional Power Relay

- 1. Determine minimum pickup at maximum torque angle.
- 2. Determine closing zone.
- 3. Determine maximum torque angle.
- 4. Determine time delay.
- 5. Verify the time delay at a second point on the timing curve for inverse time relays.
- 6. Plot the operating characteristic.

### 7. 40 Loss of Field (Impedance) Relay

- 1. Determine maximum reach.
- 2. Determine maximum torque angle.
- 3. Determine offset.
- 4. Plot impedance circle.

- 8. 46 Current Balance Relay
  - 1. Determine pickup of each unit.
  - 2. Determine percent slope.
  - 3. Determine time delay.
- 9. 46N Negative Sequence Current Relay
  - 1. Determine negative sequence alarm level.
  - 2. Determine negative sequence minimum trip level.
  - 3. Determine maximum time delay.
  - 4. Verify two points on the  $(I_2)^2$ t curve.
- 10. 47 Phase Sequence or Phase Balance Voltage Relay
  - 1. Determine positive sequence voltage to close the normally open contact.
  - 2. Determine positive sequence voltage to open the normally closed contact (undervoltage trip).
  - 3. Verify negative sequence trip.
  - 4. Determine time delay to close the normally open contact with sudden application of 120 percent of pickup.
  - 5. Determine time delay to close the normally closed contact upon removal of voltage when previously set to rated system voltage.
- 11. 49R Thermal Replica Relay
  - 1. Determine time delay at 300 percent of setting.
  - 2. Determine a second point on the operating curve.
  - 3. Determine pickup.
- 12. 49T Temperature (RTD) Relay
  - 1. Determine trip resistance.
  - 2. Determine reset resistance.
- 13. 50 Instantaneous Overcurrent Relay
  - 1. Determine pickup.

- 2. Determine dropout.
- 3. Determine time delay.

### 14. 51 Time Overcurrent

- 1. Determine minimum pickup.
- 2. Determine time delay at two points on the time current curve.

### 15. 55 Power Factor Relay

- 1. Determine tripping angle.
- 2. Determine time delay.

## 59 Overvoltage Relay

- 1. Determine overvoltage pickup.
- 2. Determine time delay to close the contact with sudden application of 120 percent of pickup.

### 17. 60 Voltage Balance Relay

- 1. Determine voltage difference to close the contacts with one source at rated voltage.
- 2. Plot the operating curve for the relay.

## 18. 63 Transformer Sudden Pressure Relay

- 1. Determine rate-of-rise or the pickup level of suddenly applied pressure in accordance with manufacturer's published data.
- 2. Verify operation of the 63 FPX seal-in circuit.
- 3. Verify trip circuit to remote operating device.

### 19. 64 Ground Detector Relay

Determine maximum impedance to ground causing relay pickup.

# 20. 67 Directional Overcurrent Relay

- 1. Determine directional unit minimum pickup at maximum torque angle.
- 2. Determine closing zone.
- 3. Determine maximum torque angle.

- 4. Plot operating characteristics.
- 5. Determine overcurrent unit pickup.
- 6. Determine overcurrent unit time delay at two points on the time current curve.

# 21. 79 Reclosing Relay

- 1. Determine time delay for each programmed reclosing interval.
- 2. Verify lockout for unsuccessful reclosing.
- 3. Determine reset time.
- 4. Determine close pulse duration.
- 5. Verify instantaneous overcurrent lockout.

# 22. 81 Frequency Relay

- 1. Verify frequency set points.
- 2. Determine time delay.
- 3. Determine undervoltage cutoff.

### 23. 85 Pilot Wire Monitor

- 1. Determine overcurrent pickup.
- 2. Determine undercurrent pickup.
- 3. Determine pilot wire ground pickup level.

### 24. 87 Differential

- 1. Determine operating unit pickup.
- 2. Determine the operation of each restraint unit.
- 3. Determine slope.
- 4. Determine harmonic restraint.
- 5. Determine instantaneous pickup.
- 6. Plot operating characteristics for each restraint.

### **Control Verification**

Verify that each of the relay contacts performs its intended function in the control scheme including breaker trip tests, close inhibit tests, 86 lockout tests, and alarm functions.

### **Test Values**

- 1. When not otherwise specified, use manufacturer's recommended tolerances.
- 2. When critical test points are specified, the relay should be calibrated to those specified points even though other test points may be out of tolerance.

# Section 7.9.2

# Protective Relays, Microprocessor-Based

# Visual and Mechanical Inspection

- Record model number, style number, serial number, firmware revision, software revision, and rated control voltage.
- Download all events from the event recorder in filtered and unfiltered mode before
  performing any tests on the relay. Download the sequence-of-events recorder prior to
  testing the relay.
- 3. Verify operation of light-emitting diodes, display, and targets.
- Record passwords for all access levels.
- 5. Clean the front panel and remove foreign material from the case.
- 6. Check tightness of connections.
- 7. Verify that the frame is grounded in accordance with manufacturer's instructions.
- 8. Download settings from the relay. Print a copy of the settings for the report and compare the settings to those specified in the coordination study.

### **Electrical Tests**

- 1. Perform insulation-resistance tests from each circuit to the grounded frame in accordance with manufacturer's published data.
- 2. Apply voltage or current to all analog inputs and verify correct registration of the relay meter functions.
- 3. Functional Operation
  - Check functional operation of each element used in the protection scheme as described for electromechanical relays.
- 4. Control Verification

- 1. Check operation of all active digital inputs.
- 2. Check all output contacts or SCRs, preferably by operating the controlled device such as circuit breaker, auxiliary relay, or alarm.
- 3. Check all internal logic functions used in the protection scheme.
- 4. Upon completion of testing reset all min/max recorders, fault counters, sequence of events recorder, and all event records.

## Section 7.2

# Transformers, Liquid-Filled

# Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Verify the presence of PCB labeling, if applicable.
- 4. Prior to cleaning the unit, perform as-found tests, if required.
- 5. Clean bushings and control cabinets.
- 6. Verify operation of alarm, control, and trip circuits from temperature and level indicators, pressure relief device, and fault pressure relay, if applicable.
- 7. Verify that cooling fans and/or pumps operate correctly.
- 8. Inspect bolted electrical connections for high resistance using one of the following methods:
  - Use of a low-resistance ohmmeter.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torquewrench method in accordance with manufacturer's published data or NETA MTS 2005, Table 100.12.
  - 3. Perform a thermographic survey.
- 9. Verify correct liquid level in tanks and bushings.
- 10. Verify that positive pressure is maintained on gas-blanketed transformers.
- 11. Perform inspections and mechanical tests as recommended by the manufacturer.

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- 14. Perform as-left tests.
- 15. Verify de-energized tap-changer position is left as specified.

### **Electrical Tests**

- 1. Perform insulation-resistance tests, winding-to-winding and each winding-to-ground. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NEA MTS 2005, Table 100.5. Calculate polarization index.
- 2. Perform turns-ratio tests at the designated tap position.
- 3. Perform insulation power-factor or dissipation-factor tests on all windings in accordance with test equipment manufacturer's published data.
- 4. Perform excitation-current tests in accordance with the test equipment manufacturer's published data.
- 5. Measure the resistance of each winding at the designated tap position.
- 6. If the core ground strap is accessible, remove and measure the core insulation resistance at 500 volts dc.
- 7. Remove a sample of insulating liquid in accordance with ASTM D 923. The sample shall be tested for the following.
  - 1. Dielectric breakdown voltage: ASTM D 877 and/or ASTM D 1816
  - 2. Acid neutralization number: ANSI/ASTM D 974
  - 3. Specific gravity: ANSI/ASTM D 1298
  - 4. Interfacial tension: ANSI/ASTM D 971 or ANSI/ASTM D 2285
  - 5. Color: ANSI/ASTM D 1500
  - 6. Visual Condition: ASTM D 1524
  - 7. Water in insulating liquids: ASTM D 1533. (Required on 25 kV or higher voltages and on all silicone-filled units.)
  - 8. Measure power factor or dissipation factor in accordance with ASTM D 924.
- 8. Remove a sample of insulating liquid in accordance with ASTM D 3613 and perform dissolved-gas analysis (DGA) in accordance with ANSI/IEEE C57.104 or ASTM D3612.
- 9. Test the transformer neutral grounding impedance devices, if applicable.

### 3.1 Test Values - Visual and Mechanical

- 1. Alarm, control, and trip circuits from temperature and level indicators as well as pressure relief device and fault pressure relay should operate within manufacturer's recommendations for their specified settings. (7.2.2.1.6)
- 2. Cooling fans and/or pumps should operate. (7.2.2.1.7)
- Compare bolted connection resistance values to values of sim lar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value. (7.2.2.1.8.1)
- 4. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.2.2.1.8.2)
- 5. Results of the thermographic survey shall be in accordance with Section 9. (7.2.2.1.8.3)
- 6. Liquid levels in the transformer tanks and bushings should be within indicated tolerances. (7.2.2.1.9)
- 7. Positive pressure (2 psig) should be indicated on pressure gauge for gas-blanketed transformers. (7.2.2.1.10)

### 3.2 Test Values - Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value.
- 2. Minimum insulation-resistance values of transformer insulation should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.5. Values of insulation resistance less than this table or manufacturer's recommendations should be investigated. The polarization index shall be compared to previously obtained results and should not be less than 1.0.
- 3. Turns-ratio test results should not deviate by more than one-half percent from either the adjacent coils or the calculated ratio.
- 4. Maximum power-factor/dissipation-factor values of liquid-filled transformers corrected to 20°C should be in accordance with the transformer manufacturer's published data. Representative values are indicated in Table 100.3.
- 6. Typical excitation-current test data pattern for a three-legged core transformer is two similar current readings and one lower current reading.
- Temperature corrected winding-resistance values should compare within one percent of previously obtained results.

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- 8. Core insulation values should be comparable to previously obtained results but not less than one megohm at 500 volts dc.
- 10. Insulating liquid values should be in accordance with Table 100.4.
- 11. Evaluate results of dissolved-gas analysis in accordance with ANSI/IEEE Standard C57.104.
- 14. Compare grounding impedance device values to previously obtained results. In the absence of previously obtained values, compare obtained values to manufacturer's published data.

# Section 9

# Thermographic Survey

As a minimum, equipment to be inspected shall include all current-carrying devices.

# Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Remove all necessary covers prior to thermographic inspection. Use appropriate caution, safety devices, and personal protective equipment.

# Thermographic Survey Report

Provide a report which includes the following:

- 1. Description of equipment to be tested.
- 2. Discrepancies.
- 3. Temperature difference between the area of concern and the reference area.
- 4. Probable cause of temperature difference.
- 5. Areas inspected. Identify inaccessible and/or unobservable areas and/or equipment.
- Identify load conditions at time of inspection.
- 7. Provide photographs and/or thermograms of the deficient area.
- 8. Provide recommended action for repair.

### **Test Parameters**

1. Inspect distribution systems with imaging equipment capable of detecting a minimum temperature difference of 1°C at 30°C.

- 2. Equipment shall detect emitted radiation and convert detected radiation to visual signal.
- 3. Thermographic surveys should be performed during periods of maximum possible loading. Refer to ANSI/NFPA 70B, Section 20.17.

### **Test Results**

ggested actions based on temperature rise can be found in Table 100 of NETA MTS -2005

# Section 7.1

# Switchgear and Switchboard Assemblies

# Visual and Mechanical Inspection

- 1. Inspect physical, electrical, and mechanical condition including evidence of moisture or corona.
- 2. Inspect anchorage, alignment, grounding, and required area clearances.

3.

- 4. Clean the unit.
- Verify that fuse and/or circuit breaker sizes and types correspond to drawings and coordination study as well as to the circuit breaker's address for microprocessorcommunication packages.
- 6. Verify that current and voltage transformer ratios correspond to drawings.
- 7. Inspect bolted electrical connections for high resistance. Perform a thermographic survey of the low voltage switchgear while the equipment is on line, and at least 2 weeks prior to the maintenance and test work.
- 8. Confirm correct operation and sequencing of electrical and mechanical interlock systems.
  - 1. Attempt closure on locked-open devices. Attempt to open locked-closed devices.
  - 2. Make key exchange with all devices included in the interlock scheme as applicable.
- 9. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 10. Verify correct barrier and shutter installation and operation.
- 11. Exercise all active components.
- 12. Inspect mechanical indicating devices for correct operation.

- 13. Verify that filters are in place and/or vents are clear.
- 14. Inspect control power transformers.
  - 1. Inspect for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring, and overall general condition.
  - 2. Verify that primary and secondary fuse ratings or circuit breakers match drawings.
  - Verify correct functioning of drawout disconnecting and grounding contacts and interlocks.
- Perform as-left tests.

### **Electrical Tests**

- 1. Perform resistance measurements through bolted electrical connections with a low-resistance ohmmeter in accordance with Section 7.1.1, if applicable.
- 2. Perform insulation—resistance tests for one minute on each bus section, phase-to-phase and phase-to-ground. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NETA MTS 2005, Table 100.1
- 3. Control Power Transformers
  - 1. Perform insulation-resistance tests. Perform measurements from winding—to-winding and each winding-to-ground. Test voltages shall be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NETA MTS 2005, Table 100.1
  - Verify correct function of control transfer relays located in switchgear with multiple power sources.
- 4. Verify operation of switchgear/switchboard heaters and their controller, if applicable.
- 5. Perform lost bus transfer tests if applicable.

### **Test Values**

### 3.2 Test Values – Electrical

Insulation-resistance values of bus insulation should be in accordance with manufacturer's
published data. In the absence of manufacturer's published data, use NEA MTS 2005,
Table 100.1. Values of insulation resistance less than this table or manufacturer's
recommendations should be investigated.

- 2. Minimum insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.
- 3. Control Power Transformers
  - Insulation-resistance values of control power transformers should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.5. Values of insulation resistance less than this table or manufacturer's recommendations should be investigated.
  - 2. Control transfer relays should perform as designed.
- 4. Heaters should be operational.

# Section 7.17

# Adjustable-Speed Drive Systems

# 1. Visual and Mechanical Inspection

- Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Prior to cleaning the unit, perform as-found tests.
- 4. Clean the unit.
- 5. Ensure vent path openings are free from debris and that heat transfer surfaces are not contaminated by oil, dust, or dirt.
- Verify correct connections of circuit boards, wiring, disconnects, and ribbon cables.
- 7. Motor running protection
  - 1. Compare drive overcurrent set points with motor full-load current rating to verify correct settings.
  - 2. If drive is used to operate multiple motors, compare individual overload element ratings with motor full-load current ratings.
  - 3. Apply minimum and maximum speed set points. Confirm set points are within limitations of the load coupled to the motor.

- 8. Inspect bolted electrical connections for high resistance using one of the following methods:
  - 1. Use of a low-resistance ohmmeter.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method in accordance with manufacturer's published data or Table 100.12.
  - 3. Perform a thermographic survey.
- 9. Verify correct fuse sizing in accordance with manufacturer's published data.
- 10. Perform as-left tests.

#### 2. Electrical Tests

- 1. Perform resistance measurements through bolted connections with low-resistance ohmmeter, if applicable.
- 2. Test the motor overload relay elements by injecting primary current through the overload circuit and monitoring trip time of the overload element.
- 3. Test input circuit breaker by primary injection.
- 4. Perform insulation resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components, follow manufacturer's recommendation.
- 5. Test for the following parameters in accordance with relay calibration procedures outlined in Section 7.9 or as recommended by the manufacturer:
  - 1. Input phase loss protection
  - 2. Input overvoltage protection
  - 3. Output phase rotation
  - 4. Overtemperature protection
  - 5. DC overvoltage protection
  - 6. Overfrequency protection
  - 7. Drive overload protection
  - 8. Fault alarm outputs

- 6. Perform continuity tests on bonding conductors in accordance with Section 7.13.
- Perform operational tests by initiating control devices.
  - 1. Slowly vary drive speed between minimum and maximum. Observe motor and load for unusual noise or vibration.
  - 2. Verify operation of drive from remote start/stop and speed control signals.

#### 3. Test Values

#### 3.1 Test Values – Visual and Mechanical

- Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.17.1.8.1)
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.17.1.8.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.17.1.8.3)

#### 3.2 Test Values – Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value.
- 2. Overload test trip times at 300 percent of overload element rating should be in accordance with manufacturer's published time-current curve.
- 3. Input circuit breaker test results shall be in accordance with Section 7.6.
- 4. Insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.
- 5. Relay calibration test results shall be in accordance with Section 7.9.
- 6. Continuity of bonding conductors shall be in accordance with Section 7.13.
- 7. Control devices should perform in accordance with system requirements.

#### **Section 7.22.3**

### **Emergency Systems, Automatic Transfer Switches**

#### 1. Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, grounding, and required clearances.
- 3. Prior to cleaning the unit, perform as-found tests.
- 4. Clean the unit.
- 5. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 6. Verify that manual transfer warnings are attached and visible.
- 7. Verify tightness of all control connections.
- 8. Inspect bolted electrical connections for high resistance using one of the following methods:
  - Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method in accordance with manufacturer's published data or Table 100.12.
  - Perform a thermographic survey in accordance with Section 9.
- 9. Perform manual transfer operation.
- 10. Verify positive mechanical interlocking between normal and alternate sources.
- Perform as-left tests.

#### 2. Electrical Tests

- 1. Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable, in accordance with Section 7.22.3.1.
- 2. Perform insulation resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components or for control devices that cannot tolerate the applied voltage, follow manufacturer's recommendation.
- 3. Perform a contact/pole-resistance test.
- Verify settings and operation of control devices.
- Calibrate and set all relays and timers in accordance with Section 7.9.

#### 6. Perform automatic transfer tests:

- 1. Simulate loss of normal power.
- 2. Return to normal power.
- 3. Simulate loss of emergency power.
- 4. Simulate all forms of single-phase conditions.

#### 7. Verify correct operation and timing of the following functions:

- 1. Normal source voltage-sensing relays.
- 2. Engine start sequence.
- 3. Time delay upon transfer.
- Alternate source voltage-sensing relays.
- 5. Automatic transfer operation.
- Interlocks and limit switch function.
- 7. Time delay and retransfer upon normal power restoration.
- 8. Engine cool down and shutdown feature.

#### 3. Test Values

#### 3.1 Test Values – Visual and Mechanical

- 1. Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.22.3.1.8.1)
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.22.3.1.8.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.22.3.1.8.3)

#### 3.2 Test Values – Electrical

 Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value.

- 2. Insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two meghoms.
- 3. Microhm or millivolt drop values should not exceed the high levels of the normal range as indicated in the manufacturer's published data. If manufacturer's data is not available, investigate values that deviate from adjacent poles or similar switches by more than 50 percent of the lowest value.
- 4. Control devices should operate in accordance with manufacturer's published data.
- 5. Relay test results shall be in accordance with Section 7.9.
- 6. Automatic transfers should operate in accordance with manufacturer's design.
- 7. Operation and timing should be in accordance with manufacturer's and/or system design requirements.

# ATTACHMENT B SUPPLIES OR SERVICES AND PRICES/COSTS All pricing is to be Normal working hours unless otherwise stated

### Old East Sub-Station & Load Center #1

					1127
001.	Perform Allis Chalmers & Westinghouse 208 V Breaker Annual Maintenance: Load Center # 1 208 V breakers in service, to be secondary tested, meggered, ductored, cleaned and lubricated per NETA MTS guidelines. Outages will be required.	\$ \$	X X	(LA25) 11 (LA75) 1	\$ \$
	Perform Allis Chalmers 5 KV Circuit Breaker Annual Inspection (Load Center #1): Medium voltage air breakers, to be removed, hi pot and megaword, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours.	\$ \$	x x	(1200A) 1 Primary Incoming (1200A) 7 Secondary Outgoing	\$ \$
002.	208V main above A/C 100HP Starters service, to be secondary tested, meggered, ductored, cleaned and lubricated per NETA MTS weekday work as outages will be required.	\$	X	(Starters) 7	\$
003.	Perform Allis Chalmers 15 kV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours.	\$	X	4	\$

004.	Perform Allis Chalmers 5 KV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and megaword, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours.	\$ x	22	\$
005.	Perform Old East Sub-Station DC System Annual Inspection and Maintenance of relays on the Allis Chalmers 15KV breakers in the East Sub. Sta. weekday work as an outage is not anticipated	\$ X	1	\$
006.	Perform Allis Chalmers 15K to 4160v (PCB's) Transformers Annual Electrical Inspection & Testing: Transformers to be megaword, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours	\$ x	4	\$
007.	Perform Allis Chalmers (PCB's) 5k to 208v Transformers Annual Electrical Inspection & Testing: L/C # 1 Transformers to be megaword, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$ x	1	\$
008.	Test and Calibrations for settings on 5 KV & 15 KV relays and doc. all test results (See chart for relay list).	\$ x	95	\$

## Old West Refrigeration Plant Sub-Station S/W Gear

	Services	<u>Unit Price</u>	8	Estimated Quantity*	Total Price
009.	Perform Allis Chalmers 480 VAC Breaker Triennial Maintenance:  480 V breakers in service, to be secondary tested, meggered, ductored, cleaned and lubricated per NETA MTS guidelines, overtime work as outages will be	\$	X	16	\$
010.	Perform Allis Chalmers 480 VAC Breaker Triennial Maintenance:  480V main and tie breakers and spares, scope as above except weekday work as outages will not be needed.	\$	x	7	\$

011.	Perform I-T-E 15 kV Circuit Breaker Annual Inspection:  Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	16	= \$
	Perform I-T-E 5 kV Circuit Breaker Annual Inspection:			
012.	Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	35	= \$
013.	Blank			
		\$ х		= \$
014.	Perform15K to 4160v Transformers Annual Electrical Inspection & Testing:  Transformers to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours Perform 15k to 480v Transformers Annual Electrical Inspection & Testing:	\$ x	2	= \$

015.	Transformers to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination,	G 64	117	I	
	dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$	Х	2	= \$
016.	Perform Test and Calibrations for settings on 5 KV & 15 KV relays and doc. all test results (See chart for relay list).	\$	X	189	= \$

### New West Refrigeration Plant Expansion Sub-Station

N.			1 3		
017.	Perform Cutler Hammer 480 VAC Breaker Triennial Maintenance: 480 V breakers in service, to be secondary tested, meggered, ductored, cleaned and lubricated per NETA MTS guidelines, Reg. hours work as outages will be requireded.	\$	X	(3) DS II 840 800 amps Frame breaker	= \$
018.	480V main and tie breakers and spares, scope as above except weekday work as outages will not be needed.	\$	X	(3) DS II 840 4000 amps Frame breaker	= \$
019.	Perform Cutler Hammer 15 kV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ \$	X	2000R amps (17)150	= \$ = \$
020.	Perform Cutler Hammer 5 kV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as required during normal working hours	\$ \$	X	1200amps (3) 50- vcp-50c	= \$ = \$
021.	Perform West Refrigeration Plant DC System Annual Inspection and Maintenance of relays on the 5 and Cutler Hammer 15KV breakers in the west plant, including the new solid state units on the Cutler Hammer 5KV gear, weekday work as an outage is not anticipated	\$	х	106	= \$

022.	Perform15K to 4160v Transformers Annual Electrical Inspection & Testing: Transformers Cutler Hammer to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as required during normal working hours	\$ х	4	= \$
023.	Perform 15k to 480v Transformers Annual Electrical Inspection & Testing: Transformers Cutler Hammer to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$ х	2	=\$
024.	Perform Test and Calibrations for settings on 5 KV & 15 KV relays and doc. all test results (See chart for relay list).	\$ Х	89	=\$
025.	Perform Test and Calibrations for settings on 480v Culter Hammer 9000 VFD's	\$ х	3	=\$
026.	Perform Test and Calibrations for settings on 480v Culter Hammer Motor Control Center	\$ x	1	=\$
027	Perform Test and Calibrations for settings on 4160v Culter Hammer Motor Control Center Pumps	\$ X	4	=\$

### New East Sub-Station and Emergency Systems, Swicth-Gear for Automatic Generator Transfer.(Load Center 2 & 3)

028.	Perform Annual ASCO 7000 Series Transfer SW 480 VAC Maintenance: Emergency Systems, 800 Amp Automatic Transfer Switch,	\$ х	(1) 800amp Transfer Sw	\$
029.	480V breakers in 800 Amp Service, tighted, tested & cleaned and per NEA MTS guidelines, work will be done Reg. hours outages will be needed.	\$ Х	(1) 800amp Panel Board	\$
030.	Perform Maintenance: Emergency Systems, Switch gear for Automatic Generator power, to Transfer Switch's 2000amp C/H	\$ Х	(2) 2000 amp Trans./SW	\$
031.	Cutler Hammer 480V Circuit Breakers Annual Inspection: DSII -608 800amp voltage air breakers, to be removed, tested by means of portable hipot or megohmmeter, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	(4) 800 amp DSII Breakers	\$

032.	Perform Cutler Hammer 208VCircuit Breaker Annual Inspection: DSII -620 2000amp 208 voltage air breakers, to removed, hi pot and megaword, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	(6) 2000amp Breakers	\$
033.	Perform West Plant DC System Annual Inspection; Maintenance of relays on the Cutler HammerDSII - 620 800amp 208V breakers n the New East plant, including the new solid state units on the Cutler Hammer 208V gear, weekday work as an outage is not anticipated	\$ X	(35) 800amp Breakers	\$
034.	Perform 480v to 208/120v KVA 500 Transformers Annual Electrical Inspection & Testing: Maintenance: Emergency Systems, Swicth Gear for Automatic Generator power, to Transfer Switchs Transformers Cutler Hammer to be megaword, turns ratio tested, Dry Type, with outages as needed during normal working hours	\$ X	2	\$

035.	Perform 4160v to 208/120V KVA500/750 Transformers Annual Electrical Inspection & Testing: Transformers Cutler Hammer to be megaword, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$ X	4	\$
036.	Perform Test and Calibrations for settings on 208v gear relays and doc. all test results.  A. (1) C/H I Q analizer Gen SW. Gear.  B. (2) C/H Breaker Monitor M/P 3000  C. (4) C/H (IQDP) 4000  Main Load Metering	\$ X	7	\$

### General Overhead, Contract Maintenance and Option Years

037.	General Overhead and Profit to fulfill contract.	\$
038.	Total Contract Value for Base Year	\$

Please also fill in Section B, Page 2 & 3 of this solicitation.

WD 05-2103 (Rev.-4) was first posted on www.wdol.gov on 07/10/2007

\*

REGISTER OF WAGE DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARIMENT OF LABOR

EMPLOYMENT STANDARDS ADMINISTRATION

WAGE AND HOUR DIVISION

WASHINGTON D.C. 20210

Wage Determination No.: 2005-2103

Revision No.: 4

Date Of Revision: 07/05/2007

William W.Gross Director Division of Wage Determinations

States: District of Columbia, Maryland, Virginia

Area: District of Columbia Statewide

Maryland Counties of Calvert, Charles, Frederick, Montgomery, Prince George's, St

Mary's

Virginia Counties of Alexandria, Arlington, Fairfax, Falls Church, Fauquier, King

George, Loudoun, Prince William, Stafford

#### \*\*Fringe Benefits Required Follow the Occupational Listing\*\*

OCCUPATION CODE - TITLE	MINIMUM WAGE	RATE
01000 - Administrative Support And Clerical Occupations		
01011 - Accounting Clerk I		13.79
01012 - Accounting Clerk II		15.49
01013 - Accounting Clerk III		18.43
01020 - Administrative Assistant		23.59
01040 - Court Reporter		18.43
01051 - Data Entry Operator I		12.67
01052 - Data Entry Operator II		13.82
01060 - Dispatcher, Motor Vehicle		16.50
01070 - Document Preparation Clerk		13.29
01090 - Duplicating Machine Operator		13.29
01111 - General Clerk I		13.72
01112 - General Clerk II		15.32
01113 - General Clerk III		18.74
01120 - Housing Referral Assistant		21.66
01141 - Messenger Courier		10.23
01191 - Order Clerk I		14.74
01192 - Order Clerk II		16.29
01261 - Personnel Assistant (Employment) I		15.60
01262 - Personnel Assistant (Employment) II		18.43
01263 - Personnel Assistant (Employment) III		21.66
01270 - Production Control Clerk		21.29
01280 - Receptionist		12.72
01290 - Rental Clerk		15.60
01300 - Scheduler, Maintenance		15.60
01311 - Secretary I		17.03
01312 - Secretary II		18.39
01313 - Secretary III		21.66
01320 - Service Order Dispatcher		15.82
01410 - Supply Technician		23.59
01420 - Survey Worker		18.43
01531 - Travel Clerk I		12.07
01532 - Travel Clerk II		13.01

		Page 2 of 9
01533	- Travel Clerk III	13.99
01611	- Word Processor I	13.76
01612	- Word Processor II	15.60
01613	- Word Processor III	18.43
05000 -	Automotive Service Occupations	
	- Automobile Body Repairer, Fiberglass	25.26
	- Automotive Electrician	21.37
05040	- Automotive Glass Installer	20.14
05070	- Automotive Worker	20.14
05110	- Mobile Equipment Servicer	17.31
05130	- Motor Equipment Metal Mechanic	22.53
05160	- Motor Equipment Metal Worker	20.14
05190	- Motor Vehicle Mechanic	22.53
05220	- Motor Vehicle Mechanic Helper	16.81
	- Motor Vehicle Upholstery Worker	19.66
	- Motor Vehicle Wrecker	20.14
05310	- Painter, Automotive	21.37
	- Radiator Repair Specialist	20.14
	- Tire Repairer	14.43
	- Transmission Repair Specialist	22.53
	Food Preparation And Service Occupations	
	- Baker	13.18
	- Cook I	11.97
	- Cook II	13.28
	- Dishwasher	9.76
	- Food Service Worker	10.25
	- Meat Cutter	16.07
	- Waiter/Waitress	8.59
	Furniture Maintenance And Repair Occupations	1000 200
	- Electrostatic Spray Painter	18.05
997533763345A	- Furniture Handler	12.78
	- Furniture Refinisher	18.39
	- Furniture Refinisher Helper	14.11
	- Furniture Repairer, Minor	16.31
	- Upholsterer	18.05
	General Services And Support Occupations	0 67
	- Cleaner, Vehicles	9.67
	- Elevator Operator - Gardener	9.79 15.70
	- Housekeeping Aide - Janitor	10.89
	- Laborer, Grounds Maintenance	12.07
	- Maid or Houseman	10.84
	- Pruner	11.37
	- Tractor Operator	14.19
	- Trail Maintenance Worker	12.07
	- Window Cleaner	11.31
	Health Occupations	
	- Ambulance Driver	16.06
	- Breath Alcohol Technician	17.67
	- Certified Occupational Therapist Assistant	20.31
	- Certified Physical Therapist Assistant	19.99
	- Dental Assistant	16.90
12025	- Dental Hygienist	40.68
	- EKG Technician	24.34
12035	- Electroneurodiagnostic Technologist	24.34
12040	- Emergency Medical Technician	17.67
12071	- Licensed Practical Nurse I	18.60
	- Licensed Practical Nurse II	20.82
12073	- Licensed Practical Nurse III	21.79

		Page 3 of 9
12100	- Medical Assistant	14.23
	- Medical Laboratory Technician	18.04
	- Medical Record Clerk	14.96
	- Medical Record Technician	16.67
	- Medical Transcriptionist	16.46
	- Nuclear Medicine Technologist	28.93
	- Nursing Assistant I	9.75
	- Nursing Assistant II	10.96
	- Nursing Assistant III	12.99
	- Nursing Assistant IV	14.58
	- Optical Dispenser	16.67
	- Optical Technician	14.41
	- Pharmacy Technician	15.75
	- Phlebotomist	14.58
12305	- Radiologic Technologist	27.61
12311	- Registered Nurse I	24.92
12312	- Registered Nurse II	31.22
12313	- Registered Nurse II, Specialist	31.22
12314	- Registered Nurse III	37.77
12315	- Registered Nurse III, Anesthetist	37.77
12316	- Registered Nurse IV	45.28
12317	- Scheduler (Drug and Alcohol Testing)	18.04
	Information And Arts Occupations	
	- Exhibits Specialist I	18.55
	- Exhibits Specialist II	23.33
	- Exhibits Specialist III	28.11
	- Illustrator I	18.73
	- Illustrator II	23.42
	- Illustrator III	28.82
	- Librarian	25.45
	- Library Aide/Clerk	12.52
	- Library Information Technology Systems Administrator	22.99
	- Library Technician	17.88
	- Media Specialist I	16.58
	- Media Specialist II - Media Specialist III	18.55
	- Media Specialist III - Photographer I	14.67
	- Photographer II	17.18
	- Photographer III	21.52
	- Photographer IV	26.05
	- Photographer V	29.15
	- Video Teleconference Technician	16.58
	Information Technology Occupations	
	- Computer Operator I	16.72
	- Computer Operator II	18.71
	- Computer Operator III	20.86
14044	- Computer Operator IV	23.18
14045	- Computer Operator V	25.66
	- Computer Programmer I (1)	21.60
	- Computer Programmer II (1)	26.37
	- Computer Programmer III (1)	27.62
	- Computer Programmer IV (1)	27.62
	- Computer Systems Analyst I (1)	27.62
	- Computer Systems Analyst II (1)	27.62
	- Computer Systems Analyst III (1)	27.62
	- Peripheral Equipment Operator	16.72
	- Personal Computer Support Technician	23.18
	Instructional Occupations	24 20
	- Aircrew Training Devices Instructor (Non-Rated) - Aircrew Training Devices Instructor (Rated)	34.39 42.72
12070	- Alletew Italining Devices Instituctor (Ratea)	44.14

		Page 4 of 9
15030	- Air Crew Training Devices Instructor (Pilot)	50.66
	- Computer Based Training Specialist / Instructor	31.26
	- Educational Technologist	29.09
15070	- Flight Instructor (Pilot)	50.66
	- Graphic Artist	24.95
15090	- Technical Instructor	23.87
	- Technical Instructor/Course Developer	29.19
	- Test Proctor	19.04
	- Tutor	19.04
	Laundry, Dry-Cleaning, Pressing And Related Occupa	
	- Assembler	8.95
	- Counter Attendant	8.95
	- Dry Cleaner	12.21
	- Finisher, Flatwork, Machine	8.95
	- Presser, Hand	8.95
	- Presser, Machine, Drycleaning	8.95
	- Presser, Machine, Shirts	8.95
	- Presser, Machine, Wearing Apparel, Laundry	8.95
	- Sewing Machine Operator - Tailor	12.30
	- Washer, Machine	13.01
	Machine Tool Operation And Repair Occupations	9.81
	- Machine-Tool Operator (Tool Room)	10.05
	- Tool And Die Maker	18.95
	Materials Handling And Packing Occupations	23.05
	- Forklift Operator	17.26
	- Material Coordinator	21.29
	- Material Expediter	21.29
	- Material Handling Laborer	12.65
	- Order Filler	13.21
	- Production Line Worker (Food Processing)	17.28
	- Shipping Packer	14.46
	- Shipping/Receiving Clerk	14.46
	- Store Worker I	10.44
21150	- Stock Clerk	14.35
	- Tools And Parts Attendant	17.26
21410	- Warehouse Specialist	17.26
	Mechanics And Maintenance And Repair Occupations	
	- Aerospace Structural Welder	25.68
23021	- Aircraft Mechanic I	24.46
23022	- Aircraft Mechanic II	25.68
23023	- Aircraft Mechanic III	26.97
	- Aircraft Mechanic Helper	16.61
	- Aircraft, Painter	23.42
	- Aircraft Servicer	18.71
	- Aircraft Worker	19.90
	- Appliance Mechanic	20.60
	- Bicycle Repairer	14.43
	- Cable Splicer	24.98
	- Carpenter, Maintenance	20.36
	- Carpet Layer	18.70
10	- Electrician, Maintenance	25.37
	- Electronics Technician Maintenance I - Electronics Technician Maintenance II	22.08
	- Electronics Technician Maintenance II - Electronics Technician Maintenance III	23.44
	- Fabric Worker	24.70
	- Fire Alarm System Mechanic	17.90
	- Fire Extinguisher Repairer	21.46 16.50
	- Fuel Distribution System Mechanic	22.81
	- Fuel Distribution System Mechanic	19.38
	operator	17.50

			2	5
	23370	- General Maintenance Worker	20.5	91
		- Ground Support Equipment Mechanic	24.4	
		- Ground Support Equipment Servicer	18.	
		- Ground Support Equipment Worker	19.9	
		- Gunsmith I	16.	
		- Gunsmith II	19.1	
		- Gunsmith III	21.4	
		- Heating, Ventilation And Air-Conditioning Mechanic	21.9	
		- Heating, Ventilation And Air Contditioning Mechanic		
	23.13	nearing, ventifation and air contaitioning medianic	(Research Facil.	TCA)
		- Heavy Equipment Mechanic	21	16
		- Heavy Equipment Operator	21.4	
		- Instrument Mechanic		
			21.4	
		- Laboratory/Shelter Mechanic	20.3	
		- Laborer	14.3	
		- Locksmith	19.	
		- Machinery Maintenance Mechanic	21.	
		- Machinist, Maintenance	21.	
		- Maintenance Trades Helper	15.3	
		- Metrology Technician I	21.4	
		- Metrology Technician II	22.0	
		- Metrology Technician III	23.	
		- Millwright	23.3	
		- Office Appliance Repairer	21.0	
		- Painter, Maintenance	20.3	
		- Pipefitter, Maintenance	22.	
		- Plumber, Maintenance	20.9	99
		- Pneudraulic Systems Mechanic	21.4	46
	23850	- Rigger	21.4	46
	23870	- Scale Mechanic	19.3	18
	23890	- Sheet-Metal Worker, Maintenance	21.4	46
	23910	- Small Engine Mechanic	20.0	05
	23931	- Telecommunications Mechanic I	25.2	22
	23932	- Telecommunications Mechanic II	26.	58
	23950	- Telephone Lineman	24.4	43
	23960	- Welder, Combination, Maintenance	21.4	46
	23965	- Well Driller	21.4	46
	23970	- Woodcraft Worker	21.4	46
	23980	- Woodworker	16.	50
		Personal Needs Occupations		
	24570	- Child Care Attendant	11.	58
	24580	- Child Care Center Clerk	16.3	15
	24610	- Chore Aide	9.	58
	24620	- Family Readiness And Support Services Coordinator	12.	
		- Homemaker	16.	
	25000 -	Plant And System Operations Occupations		
		- Boiler Tender	24.9	98
		- Sewage Plant Operator	20.2	
		- Stationary Engineer	24.9	
		- Ventilation Equipment Tender	17.	
		- Water Treatment Plant Operator	20.2	
333		Protective Service Occupations	2011	
-		- Alarm Monitor	17.0	66
		- Baggage Inspector	11.9	
		- Corrections Officer	19.8	
		- Court Security Officer	23.2	
		- Detection Dog Handler	17.0	
		- Detection Dog Handler - Detention Officer		
		- Firefighter	19.8	
		- Guard I	22.3	
	2/101	- Guaru 1	11.	) I

				Page 6 of 9
27102	- Guard II			17.66
27131	- Police Officer I			23.94
27132	- Police Officer II			26.60
28000 -	Recreation Occupations			
28041	- Carnival Equipment Operator			12.35
28042	- Carnival Equipment Repairer			13.30
28043	- Carnival Equpment Worker			8.40
28210	- Gate Attendant/Gate Tender			13.01
	- Lifeguard			11.59
28350	- Park Attendant (Aide)			14.56
28510	- Recreation Aide/Health Facility Attendant			10.62
	- Recreation Specialist			18.04
	- Sports Official			11.59
	- Swimming Pool Operator			16.85
	Stevedoring/Longshoremen Occupational Services			
	- Blocker And Bracer			20.55
	- Hatch Tender			20.55
	- Line Handler			20.55
	- Stevedore I			19.18
	- Stevedore II			21.64
	Technical Occupations			
	- Air Traffic Control Specialist, Center (HFO) (2)			34.71
	- Air Traffic Control Specialist, Station (HFO) (2			23.94
	- Air Traffic Control Specialist, Terminal (HFO) (	2)		26.36
	- Archeological Technician I			17.06
	- Archeological Technician II			19.03
	- Archeological Technician III			23.76
	- Cartographic Technician			24.85
	- Civil Engineering Technician			22.19
	- Drafter/CAD Operator I			17.92
	- Drafter/CAD Operator II - Drafter/CAD Operator III			20.06
	- Drafter/CAD Operator IV		0.7	22.36 27.51
	- Engineering Technician I			20.19
	- Engineering Technician II		56	22.67
	- Engineering Technician III			25.37
	- Engineering Technician IV			31.43
	- Engineering Technician V			38.44
	- Engineering Technician VI			46.51
	- Environmental Technician			21.36
	- Laboratory Technician			22.36
	- Mathematical Technician			26.31
30361	- Paralegal/Legal Assistant I			20.03
	- Paralegal/Legal Assistant II			24.82
	- Paralegal/Legal Assistant III			30.35
	- Paralegal/Legal Assistant IV			36.73
30390	- Photo-Optics Technician			24.85
30461	- Technical Writer I		20.69	
30462	- Technical Writer II			25.30
	- Technical Writer III			30.61
	- Unexploded Ordnance (UXO) Technician I			22.06
	- Unexploded Ordnance (UXO) Technician II			26.69
	- Unexploded Ordnance (UXO) Technician III			31.99
	- Unexploded (UXO) Safety Escort			22.06
	- Unexploded (UXO) Sweep Personnel			22.06
	- Weather Observer, Combined Upper Air Or Surface	Programs	(2)	22.14
	- Weather Observer, Senior (2)			23.98
	Transportation/Mobile Equipment Operation Occupati	ons		44.00
	- Bus Aide			11.99
21030	- Bus Driver			17.54

31043	- Driver Courier	12.71
31260	- Parking and Lot Attendant	9.06
31290	- Shuttle Bus Driver	13.89
31310	- Taxi Driver	13.98
31361	- Truckdriver, Light	13.89
31362	- Truckdriver, Medium	17.09
31363	- Truckdriver, Heavy	18.40
31364	- Truckdriver, Tractor-Trailer	18.40
99000 -	Miscellaneous Occupations	
99030	- Cashier	10.03
99050	- Desk Clerk	10.45
99095	- Embalmer	21.77
99251	- Laboratory Animal Caretaker I	10.47
99252	- Laboratory Animal Caretaker II	10.85
99310	- Mortician	27.25
99410	- Pest Controller	14.54
99510	- Photofinishing Worker	11.59
99710	- Recycling Laborer	15.73
99711	- Recycling Specialist	18.72
99730	- Refuse Collector	14.01
99810	- Sales Clerk	11.87
99820	- School Crossing Guard	11.37
	- Survey Party Chief	19.76
99831	- Surveying Aide	12.28
99832	- Surveying Technician	18.78
99840	- Vending Machine Attendant	12.61
99841	- Vending Machine Repairer	16.37
99842	- Vending Machine Repairer Helper	12.61

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$3.16 per hour or \$126.40 per week or \$547.73 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year, New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

- 1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)
- 2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will parn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your

regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiar, materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiar, materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordance, explosives, and incendiary material differential pay.

#### \*\* UNIFORM ALLOWANCE \*\*

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona file collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "vash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

The duties of employees under job titles listed are those lescribed in the "Service Contract Act Directory of Occupations", Fifth Edition, April 2006, unless otherwise indicated. Copies of the Directory are available on the Internet. A links to the Directory may be found on the WHD home page at http://www.dol.gov/esa/whd/ or through the Wage Determinations On-Line (WDOL) Web site at http://wdol.gov/.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form

1444 (SF 1444)}

#### Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary vages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, an 1/or fringe benefits shall be retroactive to the commencement date of the contract. (See Section 4.6 (C)(vi)) When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the  $n \ge d$  for a conformed occupation) and computes a proposed rate).
- 2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalenc, (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.3. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour decision to the contractor.
- 6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

#### ATTACHMENT D

# AOC PAST PERFORMANCE QUESTION INAIRE RFP No. 080040

# ANNUAL MAINTENANCE FOR ELECTRICAL EQUIPMENT, U.S. CAPITOL POWER PLANT, WASHINGTON, D.C.

The company listed below is preparing an offer on the above projec for the Architect of the Capitol, Washington, DC. Your name has been provided as a customer reference regarding performance under a past contract with your agency/company. Your comments are considered Source Selection Sensitive, therefore, you are advised that your response will be safeguarded to the extent cited in the Federal Acquisition Regulation (FAR) 42.1503. FAR prohibits the release of past performance evaluations to other than other Government personnel and the company whose performance is being evaluated during the period the information may be used to provide source selection information.

This past performance questionnaire is being submitted by the contractor and you are requested complete it and return it to the Architect of the Capitol in care of John Friedhoff at FAX number (866) 837-6818 on, or before the proposal submission due date. While all elements below may not apply, please complete as much as possible.

#### Company/Individual Requesting Past Project Information:

Name:

Past Project Title On Which The Company Is Being Evaluated

**Project Title:** 

#### **Evaluator POC (for verification purposes)**

Name: Agency/Company, POC Date:

Phone No.: Fax No.

E-mail Address:

Address:

Position held or function in relation to project:

Ratings: Please evaluate the contractor's performance using the follo ving ratings:

"O" Outstanding The contractor's performance clearly exceeded the contract requirements.

#### AOC PAST PERFORMANCE QUESTIONNAIRE RFP080040

"S" Satisfactory
"M" Marginal

"I"

Unsatisfactory

The contractor's performance met the contract requirements. The

contractor's performance met the minimum contract requirements but with difficulty. The contractor's performance was poor and/or did not satisfy

contract requirements.

Please rate and provide supporting information for the following. If the rating is Outstanding or Unsatisfactory, please provide specific contract/job performance are as which were exceeded or not performed in accordance with the contract's minimum requirements. (Use additional sheets as needed)

1. Performance in meeting delivery/completion schedules: \_\_\_\_\_

#### Rating:

2. What did the contractor do to improve or resolve schedule problems, if any?

#### Rating:

3. The contractor's quality control (CQC).

#### Rating:

- 4. The contractor's performance in delivering quality work in accordance with the contract:
- The contractor's ability to provide the required work at a reaso table total price.

#### Rating:

6. The contractor's compliance with labor standards, if applicable.

#### Rating:

7. The contractor's compliance with safety standards.

#### Rating:

8. Has the contractor been given any of the following: Cure notice show cause, letters of reprimand, suspension of payments, termination? If yes, please explain.

#### Rating: AOC PAST PERFORMANCE QUESTIONNAIRE RFP0 30040

9. Would you award another contract to this contractor? If 10, please state reasons for not recommending this contractor additional work.

Rating:

	Rating:
11. The relationship between the contractor and owner's contract team	'Contracting Officer/COR/COTR?
12. The contractor's on-site management and coordination of subcont	Rating:
	Rating:
13. The contractor's overall corporate management, integrity, reasonate	pleness and cooperative conduct.
Has the contractor filed any modifications? How makes the contractor been provided an opportunity to discuss as so, what were the results?  OVERALL RATING Rating: Please provide any additional comments:	Control Contro

10. Was the customer satisfied with the end product?

AOC PAST PERFORMANCE QUESTIC NNAIRE RFP080040

#### AOC PAST PERFORMANCE QUESTIONNAIRE RFP No. 080040

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This past performance questionnaire is being submitted by the contractor and you are requested complete it and return it to the Architect of the Capitol in care of John Friedhoff at FAX number (866) 837-6818 on, or before the proposal submission due date. While all elements below may not apply, please complete as much as possible.

#### Company/Individual Requesting Past Project Information:

Name:
Past Project Title On Which The Company Is Being Evaluated

Project Title:

Evaluator POC (for verification purposes)

Name: Agency/Company, POC Date:

Phone No.: Fax No.

E-mail Address:

Address:

Position held or function in relation to project:

**Ratings:** Please evaluate the contractor's performance using the following ratings:

"O" Outstanding The contractor's performance clearly exceeded the contract requirements.

#### AOC PAST PERFORMANCE QUESTIONNAIRE RFP080040

"S" Satisfactory

"M" Marginal

"[J"

Unsatisfactory

The contractor's performance met the contract requirements. The

contractor's performance met the minimum contract requirements but with difficulty. The contractor's performance was poor and/or did not satisfy

contract requirements.

Please rate and provide supporting information for the following. If the rating is Outstanding or Unsatisfactory, please provide specific contract/job performance areas which were exceeded or not performed in accordance with the contract's minimum requirements. (Use additional sheets as needed)

1. Performance in meeting delivery/completion schedules:

#### Rating:

2. What did the contractor do to improve or resolve schedule problems, if any?

#### Rating:

3. The contractor's quality control (CQC).

#### Rating:

- 4. The contractor's performance in delivering quality work in accordance with the contract: Rating:
- 2 The contractor's ability to provide the required work at a reasonable total price.

#### Rating:

6. The contractor's compliance with labor standards, if applicable.

#### Rating:

7. The contractor's compliance with safety standards.

#### Rating:

8. Has the contractor been given any of the following: Cure notice, show cause, letters of reprimand, suspension of payments, termination? If yes, please explain.

#### Rating: AOC PAST PERFORMANCE QUESTIONNAIRE RFP080040

9. Would you award another contract to this contractor? If no, please state reasons for not recommending this contractor additional work.

Rating:

Rating:
11. The relationship between the contractor and owner's contract team/Contracting Officer/COR/COTR?
Rating:  12. The contractor's on-site management and coordination of subcontractors.
Rating:
13. The contractor's overall corporate management, integrity, reasonableness and cooperative conduct.
Rating:  Has the contractor filed any modifications? How many? And to what extent?  Has the contractor been provided an opportunity to discuss any negative performance ratings? If so, what were the results?  OVERALL RATING Rating:  Please provide any additional comments:

10. Was the customer satisfied with the end product?

AOC PAST PERFORMANCE QUESTIONNAIRE RFP080040

#### \*\*\*\* NOTICE \*\*\*\*

TO: ALL VENDORS/CONTRACTORS/CONSULTANTS

FROM: THE OFFICE OF THE ARCHITECT OF THE CAPITOL

Due to requirements set forth in the DEBT COLLECTION IMPROVEMENT ACT OF 1996 (PUBLIC LAW 104-134), all payments made to vendors, contractors and consultants doing business with the Federal Government must be made by Electronic Funds Transfer (EFT) directly to your financial institution. If you are currently enrolled under EFT with the Architect of the Capitol, no further action is necessary other than to report changes.

EFT payments are cost effective, enabling prompt, convenient and reliable payments directly to a designated bank account.

The Architect of the Capitol, in making EFT payments, supplies the financial institution with identifying information (ie. invoice number), which accompanies each transaction. The financial institution in turn can supply this information to the account holder.

Therefore, to accomplish the mandate of P. L. 104-134, it is necessary that the attached sheet; PAYMENT INFORMATION FORM ACH VENDOR PAYMENT SYSTEM be completed and returned with your bid or offer as set forth in Section G of the solicitation.

# PAYMENT INFORMATION FORM ACH VENDOR PAYMENT SYSTEM

This form is used for ACH payments with an addendum record that carries payment-related information. Recipients of these payments should bring this information to the attention of their financial institution when presenting this form for completion. The information will be transmitted in the CCD+ format to the designated financial institution.

#### **Debt Collection Improvement Act of 1996**

#### PAPERWORK REDUCTION ACT STATEMENT

The information being collected on this form is pursuant to Public Law 104-134, which mandated Electronic Funds Transfer for recipients of all federal payments (excluding IRS tax refunds) beginning July 24, 1996. This information will be needed by the Treasury Department to transmit payments and related data.

COMPANY INFORMATION				
NAME:				
ADDRESS:				
CONTRACT NUMBER: AOC	TAXPAYER IDENTIFICATION NUMBER (TIN):			
CONTACT PERSON NAME:	TELEPHONE NUMBER: ( ) FAX NUMBER: ( )			
AGENCY	INFORMATION			
NAME: ARCHITECT OF THE CAPITOL - FORD HOUSE OFF	ICE BUILDING			
ADDRESS: ACCOUNTING DIVISION, ROOM H2-205				
WASHINGTON, D.C. 20024	FAX NUMBER: (202) 225-7321			
CONTACT PERSON NAME: MR. JAMES JARBOE	TELEPHONE NUMBER: (202) 226-2552			
FINANCIAL INSTI	TUTION INFORMATION			
BANK NAME:				
BRANCH LOCATION: (If applicable)				
CONTACT NAME:	TELEPHONE NUMBER: ( )			
NINE DIGIT ROUTING TRANSIT NUMBER:				
DEPOSITOR ACCOUNT NUMBER:				
TYPE OF ACCOUNT: CHECKING SAVINGSLOCKBOX				
SIGNATURE AND TITLE OF REPRESENTATIVE:	TELEPHONE NUMBER:			

Architect of the Capitol Revised 06/11/99

For AOC use	e only:
ID required	
No ID	



# UNITED STATES CAPITOL POLICE WASHINGTON, D.C. 20510-7218

#### REQUEST FOR CHECK OF CRIMINAL HISTORY RECORDS

Please report with: (1) a form of valid photo identification and (2) this form; to the Identification Section, Room 103B, U.S. Capitol Police Headquarters, 119 D Street, N.E.

1 Name (Last, First, Middle)	Address:Street & No
	City & State Zip Tele:
2 Other names ever used (e.g. maide	en name, nickname, etc.)
3 Date of Birth (Month, Day, Year)	4 Birthplace (City and State or County)
5 Social Security Number	6 Sex
7 Race 8 Height 9 We	eight 10 Eye Color 11 Hair Color

### SIGNATURE AND RELEASE OF INFORMATION:

#### READ THE FOLLOWING CAREFULLY BEFORE YOU SIGN:

- I understand that the information provided above will be used to check the criminal history records of the Federal Bureau of Investigation (FBI).
- I consent to the use of the information provided above in making a security determination concerning me.
- I certify that, to the best of my knowledge and belief, all the information provided above is true, correct, and complete, and made in good faith.

	true, correct, and compl	ete, and made in good :	faith.	
			*	
12	Signature	13	B Date Signed (Month,	Day, Year)

AUTHORIZED REQUESTERS.	
14 Name/Employing Office	
15 Title	
16 Telephone number	17 Date of Request
SIGNATURE AND REQUEST:	
Capitol Police and that these fingerprint	dicated above be fingerprinted by the United States its be submitted for a check of the criminal history gation (FBI). This check will be used in making a applicant/employee.  19 Date Signed (Month, Day, Year)
inentification sections:	
20 Individual Receiving Request	
21 Date/Time Received	
22 IS #:	

#### AOC52.215-4

#### Contract Award (Jun 2004)

- (a) The Government will evaluate offers in response to this solicitation without discussions and will award a contract to the responsible offeror whose offer, conforming to the solicitation, will be most advantageous to the Government considering only price and the price-related factors specified elsewhere in the solicitation. Therefore, the offeror s in itial proposal should contain the offeror s best terms from a price standpoint. The Government reserves the right to conduct discussion
- (b) The Government may
- (1) Reject any or all offers;
- (2) Accept other than the lowest offer; and
- (3) Waive informalities or minor irregularities in offers received.
- (c) The Government may accept any item or combination of items, unless doing so is precluced by a restrictive limitation in the solicitation or the offer.
- (d) A written award or acceptance of offer mailed or otherwise furnished to the successful of error within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. I efore the offer's specified expiration time, the Government may accept an offer (or part of an offer as provided in Paragraph (c) of this clause), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. I egotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.

(e) Neither financial data submitted with an offer, nor representations concerning facilities or financing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, i accurate, or not current.

(f) The Government may determine that an offer is unacceptable if the prices proposed are m terially unbalanced between line items or sub line items. Unbalanced pricing exists when, despite an acceptable total evaluated price the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable sk to the Government.

(End of provision)

#### SECTION M

#### EVALUATION FACTORS FOR AWARD

#### M.1 PROPOSAL EVALUATION CRITERIA (AOC) (JUN 2003)

.1 The evaluation criteria to be used by the Contracting Officer for the selection of a contractor to perform the work specified are defined below. The criteria are divided into technical and price categories which consist of subsections corresponding to those in the article entitled INSTRUCTIONS FOR PREPARING THE TECHNICAL PROPOSAL and the article entitled INSTRUCTIONS FOR PI EPARING THE PRICE PROPOSAL in Section L. The technical criteria are considered by the Architect to be generally more important

RFP080040

than price criteria. However, as the difference in technical merit between the p oposals becomes less significant, the relative importance of the price will increase.

.2 TECHNICAL CRITERIA. Each offeror s proposal will be evaluated in accordance with the technical criteria listed below to determine whether it is responsive to the requirements of the R P and are therefore acceptable. Technical criteria are listed below in descending order of importance:

#### .1 Factor 1 Quality Control -

1. The Offeror's Quality Control will be evaluated to determine if the procedures which address Welding Procedure Specifications and Procedure Qualification Records for each repair vill fulfill the requirements and objectives under this solicitation. As well as How their Plan of Accomplishment to will fullfill the requirements under this solicitation.

#### .2 Factor 2 - Corporate Experience (General Contractor/Major Subcontractor). -

- 1. The Offeror s and the proposed subcontractors experience will be evaluated o determine the extent of successful completion of projects, performed within the past three years, with minimum of three successfully completed projects of similar scope, size and complexity to the requirements of this project (Services for preventative maintenance and repairs).
- 2. The experience with the subcontractors and related projects will be evaluate for the extent of successful completion of projects, performed within the past three years, of similar scope, size and complexity to the requirements of this project (Services for preventative maintenance and repairs.

#### .3 Factor 3 - Key Personnel (Project Manager and Field Technicians) -

- 1. The Government will evaluate the qualifications and experience on the resultes of the Offeror's key personnel, including Project Manager and field technicians.
- 2. The purpose of the key personnel information is to evaluate the Offeror s ab ity to provide quality personnel who have the necessary qualifications and experience, in terms of training, bac ground, and recent technical experience, to successfully perform the requirements of this solicitation.

#### .4 Factor 4 - Past Performance (General Contractor/Major Subcontractor ) -

- 1. The Offeror s and the proposed subcontractors past performance will be evaluated to determine the extent of successful completion of projects, performed within the past three years, of sin ilar scope, size and complexity to the requirements of this project (Services for preventive maintenance and regains).
- 2. The AOC will use references provided (Past Performance Questionnaire) in his factor to verify the offeror s and proposed subcontractors past performance relative to conforming to contrate trequirements, meeting prescribed schedules, and history of reasonable and cooperative behavior. Time liness and degree of client satisfaction for each project will be taken into consideration. Proposed subcont actors will be evaluated to determine if their qualifications are sufficient to carry out their portion of the work as described in the specification. The AOC may use other references/information to verify past performance.
- .3 PRICE CRITERIA. The Government will evaluate the price proposals of all "irms found technically qualified. Price criterion measure not only actual dollars but also analyze reaso ableness of the Offeror's proposed price and its position in the range of all prices.

Contract Award - Source Selection Procedures (Jun 2004)

- (a) The Government will award a contract resulting from this solicitation to the responsible of error whose offer conforming to the solicitation will be most advantageous to the Government, cost or price and other factors, spe ified elsewhere in this solicitation, considered.
- (b) The Government may
- (1) Reject any or all offers if such action is in the public interest;
- (2) Accept other than the lowest offer; and
- (3) Waive informalities and minor irregularities in offers received.
- (c) The Government intends to evaluate proposals and award a contract without discussions w h offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror s initial proposal should contain the offeror's best terms from a price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Office relater determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in he competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit he number of proposals in the competitive range to the greatest number that will permit an efficient competition among the roost highly rated proposals.

- (d) The Government may accept any item or combination of items, unless doing so is preclude 1 by a restrictive limitation in the solicitation or the offer.
- (e) A written award or acceptance of offer mailed or otherwise furnished to the successful offer or within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. B fore the offer's specified expiration time, the Government may accept an offer (or part of an offer as provided in Paragraph (d) of his provision), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. N gotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.

(f) Neither financial data submitted with an offer, nor representations concerning facilities or f nancing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, in ccurate, or not current.

(g) The Government may determine that an offer is unacceptable if the prices proposed are magrially unbalanced between line items or sub line items. Unbalanced pricing exists when, despite an acceptable total evaluated price, he price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable ri k to the Government.

(End of provision)

#### 52.252-1 Sec. M

#### 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same fe ce and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror i cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or o fer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically in this/these address(es):

www.gsa.gov or www.arnet.gov

(End of provision)

Clauses By Reference

Clause	Title	Date
52.217-5	Evaluation Of Options	11/08/2006

#### Attachment A

#### **ELECTRICAL PM SPECIFICATION**

#### A SCOPE AND DESCRIPTION OF WORK

The contractor will provide all services and materials as required to perform annual, preventative maintenance for equipment listed on the attached pricing worksheet an in accordance with NETA MTS-2005. The following is an outline of the services required to perform this work. The section numbers referenced in the sections below are from NETA MTS-2005:

# Section 7.1 Switchgear and Switchboard Assemblies

# 1. Visual and Mechanical Inspection

- 1. Inspect physical, electrical, and mechanical condition including evidence of moisture or corona.
- 2. Inspect anchorage, alignment, grounding, and required area clearances.
- 3. Clean the unit.
- Verify that fuse and/or circuit breaker sizes and types correspond to drawings and coordination study as well as to the circuit breaker's address for microprocessorcommunication packages.
- 5. Verify that current and voltage transformer ratios correspond to drawings.
- 6. Inspect bolted electrical connections for high resistance. Perform a thermographic survey of the low voltage switchgear while the equipment is on line, and at least 2 weeks prior to the maintenance and test work.
- 7. Confirm correct operation and sequencing of electrical and mechanical interlock systems.
  - 1. Attempt closure on locked-open devices. Attempt to open locked-closed devices.
  - 2. Make key exchange with all devices included in the interlock scheme as applicable.
- 8. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 9. Verify correct barrier and shutter installation and operation.
- 10. Exercise all active components.
- 11. Inspect mechanical indicating devices for correct operation.

- 12. Verify that filters are in place and/or vents are clear.
- 13. Inspect control power transformers.
  - 1. Inspect for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring, and overall general condition.
  - 2. Verify that primary and secondary fuse ratings or circuit breakers match drawings.
  - Verify correct functioning of drawout disconnecting and grounding contacts and interlocks.
- Perform as-left tests.

#### 2. Electrical Tests

- 1. Perform resistance measurements through bolted electrical connections with a low-resistance ohmmeter in accordance with Section 7.1.1, if applicable.
- 2. Perform insulation—resistance tests for one minute on each bus section, phase-to-phase and phase-to-ground. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NETA MTS 2005, Table 100.1
- 3. Control Power Transformers
  - 1. Perform insulation-resistance tests. Perform measurements from winding-to-winding and each winding-to-ground. Test voltages shall be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NEA MTS 2005, Table 100.1
  - 2. Verify correct function of control transfer relays located in switchgear with multiple power sources.
- 4. Verify operation of switchgear/switchboard heaters and their controller, if applicable.
- 5. Perform lost bus transfer tests if applicable.

#### 3. Test Values

#### 3.2 Test Values – Electrical

- Insulation-resistance values of bus insulation should be in accordance with manufacturer's
  published data. In the absence of manufacturer's published data, use NEA MTS 2005,
  Table 100.1. Values of insulation resistance less than this table or manufacturer's
  recommendations should be investigated.
- 2. Minimum insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.

- 3. Control Power Transformers
  - 1. Insulation-resistance values of control power transformers should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.5. Values of insulation resistance less than this table or manufacturer's recommendations should be investigated.
  - Control transfer relays should perform as designed.
- 4. Heaters should be operational.

# **Section 7.6.1.2**

# Circuit Breakers, Air, Low-Voltage Power

## Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Verify that all maintenance devices are available for servicing and operating the breaker.
- 4. Prior to cleaning the unit, perform as-found tests, if required.
- Clean the unit.
- 6. Inspect arc chutes.
- 7. Inspect moving and stationary contacts for condition, wear, and alignment.
- 8. Verify that primary and secondary contact wipe and other dimensions vital to satisfactory operation of the breaker are correct.
- 9. Perform all mechanical operator and contact alignment tests on both the breaker and its operating mechanism in accordance with manufacturer's published data.
- 10. Inspect bolted electrical connections for high resistance using one of the following methods:
  - 1. Use of a low-resistance ohmmeter in accordance with Section 7.6.1.2.2.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torquewrench method in accordance with manufacturer's published data or Table 100.12.
  - 3. Perform a thermographic survey in accordance with Section 9.
- 11. Verify cell fit and element alignment.

- 12. Verify racking mechanism operation.
- 13. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 14. Perform as-left tests.
- 15. Record as-found and as-left operation counter readings, if applicable.

#### **Electrical Tests**

- 1. Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable, in accordance with Section 7.6.1.2.1.
- 2. Perform insulation-resistance tests for one minute on each pole, phase-to-phase and phase-to-ground with the circuit breaker closed, and across each open pole. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.1.
- 3. Perform a contact/pole-resistance test.
- 4. Perform insulation-resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components, follow manufacturer's recommendation.
- 5. Determine long-time pickup and delay by primary current injection.
- 6. Determine short-time pickup and delay by primary current injection.
- 7. Determine ground-fault pickup and delay by primary current injection.
- 8. Determine instantaneous pickup current by primary current injection.
- 9. Test functions of the trip unit by means of secondary injection.
- 10. Perform minimum pickup voltage test on shunt trip and close coils in accordance with Table 100.20.
- 11. Verify operation of charging mechanism.
- 12. Verify correct operation of auxiliary features such as trip and pickup indicators, zone interlocking, electrical close and trip operation, trip-free, antipump function, and trip unit battery condition. Reset all trip logs and indicators.

#### **Test Values**

Test Values - Visual and Mechanical

- 1. Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.6.1.2.1.10.1).
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.6.1.2.1.10.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.6.1.2.1.10.3)

#### Test Values – Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value.
- Insulation-resistance values of breakers should be in accordance with manufacturer's
  published data. In the absence of manufacturer's published data, use Table 100.1. Values of
  insulation resistance less than this table or manufacturer's recommendations should be
  investigated.
- 3. Microhm or millivolt drop values should not exceed the high levels of the normal range as indicated in the manufacturer's published data. If manufacturer's data is not available, investigate values that deviate from adjacent poles or similar breakers by more than 50 percent of the lowest value.
- 4. Insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.
- 5. Long-time pickup values should be as specified, and the trip characteristic shall not exceed manufacturer's published time-current characteristic tolerance band, including adjustment factors. If manufacturer's curves are not available, trip times shall not exceed the value shown in Table 100.7. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- 6. Short-time pickup values should be as specified, and the trip characteristic should not exceed manufacturer's published time-current tolerance band. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- 7. Ground fault pickup values should be as specified, and the trip characteristic should not exceed manufacturer's published time-current tolerance band. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- 8. Instantaneous pickup values should be within the tolerances of manufacturer's published data. In the absence of manufacturer's published data, refer to Table 100.8. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- Pickup values and trip characteristic should be as specified and within manufacturer's published tolerances. (Circuit breakers exceeding specified trip time shall be tagged defective.)

- 10. Minimum pickup voltage on shunt trip and close coils should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, refer to Table 100.20.
- 11. The charging mechanism should operate in accordance with manufacturer's published data.
- 12. Auxiliary features should operate in accordance with manufacturer's published data.

# **Section 7.6.1.3**

# Circuit Breakers, Air, Medium-Voltage

## Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Verify that all maintenance devices are available for servicing and operating the breaker.
- 4. Prior to cleaning the unit, perform as-found tests, if required.
- 5. Clean the unit.
- 6. Inspect arc chutes.
- 7. Inspect moving and stationary contacts for condition, wear, and alignment.
- 8. If recommended by manufacturer, slow close/open breaker and check for binding, friction, contact alignment, contact sequence, and penetration.
- 9. Perform all mechanical operation tests on the operating mechanism in accordance with manufacturer's published data.
- 10. Inspect bolted electrical connections for high resistance using one of the following methods:
  - 1. Use of a low-resistance ohmmeter in accordance with Section 7.6.1.3.2.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torquewrench method in accordance with manufacturer's published data or Table 100.12.
  - 3. Perform a thermographic survey in accordance with Section 9.
- 11. Verify cell fit and element alignment.
- 12. Verify racking mechanism operation.
- 13. Inspect puffer operation.

- 14. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 15. Perform time-travel analysis.
- 16. Perform as-left tests.
- 17. Record as-found and as-left operation-counter readings.

## **Electrical Tests**

- 1. Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable. See Section 7.6.1.3.1.
- 2. Perform insulation-resistance tests on each pole, phase-to-phase and phase-to-ground with the circuit breaker closed, and across each open pole for one minute. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.1.
- 3. Perform insulation-resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components or control devices that cannot tolerate the applied voltage, follow manufacturer's recommendation.
- 4. Perform a contact/pole-resistance test.
- 5. With the breaker in a test position, perform the following tests:
  - 1. Trip and close breaker with the control switch.
  - 2. Trip breaker by operating each of its protective relays.
  - 3. Verify mechanism charge, trip-free, and antipump functions.
- 6. Perform minimum pickup voltage tests on trip and close coils in accordance with Table 100.20.
- 7. Perform power-factor or dissipation-factor tests with breaker in both the open and closed positions.
- 8. Perform power-factor or dissipation-factor test on each bushing.
- 9. Perform an overpotential test on each phase with the circuit breaker closed and the poles not under test grounded. Test voltage should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.19.
- 10. Verify blowout coil circuit continuity.

- 11. Verify operation of heaters, if applicable.
- 12. Test instrument transformers in accordance with Section 7.10.

#### **Test Values**

#### Test Values - Visual and Mechanical

- 1. Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.6.1.3.1.10.1)
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.6.1.3.1.10.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.6.1.3.1.10.3)
- 4. Compare travel and velocity values to manufacturer's published data and previous test data. (7.6.1.3.1.15)

#### Test Values – Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value.
- 2. Circuit breaker insulation resistance should be in accordance with Table 100.1.
- Insulation-resistance values of circuit breakers should be in accordance with
  manufacturer's published data. In the absence of manufacturer's published data, use Table
  100.1. Values of insulation resistance less than this table or manufacturer's
  recommendations should be investigated.
- 4. Microhm or millivolt drop values shall not exceed the high levels of the normal range as indicated in the manufacturer's published data. If manufacturer's data is not available, investigate values that deviate from adjacent poles or similar breakers by more than 50 percent of the lowest value.
- 5. Breaker mechanism charge, close, open, trip, trip-free, and antipump features shall function as designed.
- 6. Minimum pickup for trip and close coils shall be in accordance with manufacturer's published data. In the absence of manufacturer's data, refer to Table 100.20.
- 7. Power-factor or dissipation-factor values shall be compared with previous test results of similar breakers or manufacturer's published data.

- 8. Power-factor or dissipation-factor and capacitance values should be within ten percent of nameplate rating for bushings. Hot collar tests are evaluated on a milliampere/milliwatt loss basis, and the results should be compared to values of similar bushings.
- If no evidence of distress or insulation failure is observed by the end of the total time of
  voltage application during the overpotential test, the circuit breaker is considered to have
  passed the test.
- 10. The blowout coil circuit should exhibit continuity.
- 11. Heaters should be operational.
- 12. The results of instrument transformer tests shall be in accordance with Section 7.10.

# Relays 5KV & 15KV Sub Stations

# Visual and Mechanical Inspection

- 1. Inspect relays and cases for physical damage.
- 2. Prior to cleaning the unit, perform as-found tests.
- Clean the unit.
- 4. Tighten case connections. Inspect cover for correct gasket seal. Clean cover glass. Inspect shorting hardware, connection paddles, and/or knife switches. Remove any foreign material from the case. Verify target reset.
- 5. Inspect relay for foreign material, particularly in disk slots of the damping and electromagnets. Verify disk clearance. Verify contact clearance and spring bias. Inspect spiral spring convolutions. Inspect disk and contacts for freedom of movement and correct travel. Verify tightness of mounting hardware and connections. Burnish contacts. Inspect bearings and/or pivots.
- 6. Verify that all settings are in accordance with coordination study or setting sheet supplied by owner, if available.
- Perform as-left tests.

#### **Electrical Tests**

- 1. Perform insulation-resistance test on each circuit-to-frame. Determine from the manufacturer's published data the allowable procedures for this test for solid-state and microprocessor-based relays.
- 2. Inspect targets and indicators.

- 1. Determine pickup and dropout of electromechanical targets.
- 2. Verify operation of all light-emitting diode indicators.
- 3. Set contrast for liquid-crystal display readouts.

# 3. Functional Operation

- 1. 2/62 Timing Relay
  - 1. Determine time delay.
  - 2. Verify operation of instantaneous contacts.
- 2. 21 Distance Relay
  - 1. Determine maximum reach.
  - 2. Determine maximum torque angle.
  - 3. Determine offset.
  - 4. Plot impedance circle.
- 3. 24 Volts/Hertz Relay
  - 1. Determine pickup frequency at rated voltage.
  - 2. Determine pickup frequency at a second voltage level.
  - 3. Determine time delay.
- 4. 25 Sync Check Relay
  - 1. Determine closing zone at rated voltage.
  - 2. Determine maximum voltage differential that permits closing at zero degrees.
  - 3. Determine live line, live bus, dead line, and dead bus set points.
  - 4. Determine time delay.
  - 5. Verify dead bus/live line, dead line/live bus and dead bus/dead line control functions.

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- 1. 27 Undervoltage Relay
  - 1. Determine dropout voltage.
  - 2. Determine time delay.
  - 3. Determine the time delay at a second point on the timing curve for inverse time relays.
- 2. 32 Directional Power Relay
  - 1. Determine minimum pickup at maximum torque angle.
  - 2. Determine closing zone.
  - 3. Determine maximum torque angle.
  - 4. Determine time delay.
  - 5. Verify the time delay at a second point on the timing curve for inverse time relays.
  - 6. Plot the operating characteristic.
  - 1. Determine positive sequence voltage to close the normally open contact.
  - 2. Determine positive sequence voltage to open the normally closed contact (undervoltage trip).
  - 3. Verify negative sequence trip.
  - 4. Determine time delay to close the normally open contact with sudden application of 120 percent of pickup.
  - 5. Determine time delay to close the normally closed contact upon removal of voltage when previously set to rated system voltage.
- 4. 49R Thermal Replica Relay
  - 1. Determine time delay at 300 percent of setting.
  - 2. Determine a second point on the operating curve.
  - 3. Determine pickup.

### 5.50 Instantaneous Overcurrent Relay

- 1. Determine pickup.
- 2. Determine dropout.
- 6. 51 Time Overcurrent
  - 1. Determine minimum pickup.
  - 2. Determine time delays at two points on the time current curve.
- 7. 59 Overvoltage Relay
  - 1. Determine overvoltage pickup.
  - 2. Determine time delay to close the contact with sudden application of 120 percent of pickup.
- 8. 60 Voltage Balance Relay
  - 1. Determine voltage difference to close the contacts with one source at rated voltage.
- 9. 67 Directional Overcurrent Relay
  - 1. Determine directional unit minimum pickup at maximum torque angle.
  - 2. Determine closing zone.
  - 4. Plot operating characteristics.
  - 5. Determine overcurrent unit pickup.
  - 6. Determine overcurrent unit time delay at two points on the time current curve.
- 10. 81 Frequency Relay
  - 1. Verify frequency set points.
  - 2. Determine time delay.
  - 3. Determine undervoltage cutoff.
- 11. 87 Differential
  - 1. Determine operating unit pickup.
  - 2. Determine the operation of each restraint unit.

- 3. Determine slope.
- 4. Determine harmonic restraint.
- 5. Determine instantaneous pickup.

#### 4. Control Verification

- Verify that each of the relay contacts performs its intended function in the control scheme including breaker trip tests, close inhibit tests, 86 lockout tests, and alarm functions.
- 2. For microprocessor-based relays, verify all used inputs, outputs, and internal logic.

#### 5. Test Values

- 1. When not otherwise specified, use manufacturer's recommended tolerances.
- 2. When critical test points are specified, the relay should be calibrated to those points even though other test points may be out of tolerance.

# Section 7.9.1

# Protective Relays, Electromechanical and Solid-State

# Visual and Mechanical Inspection

- 1. Inspect relays and cases for physical damage.
- 2. Prior to cleaning the unit, perform as-found tests, if required.
- Clean the unit.
- Relay Case
  - 1. Tighten case connections.
  - 2. Inspect cover for correct gasket seal.
  - 3. Clean cover glass. Inspect shorting hardware, connection paddles, and/or knife switches.
  - 4. Remove any foreign material from the case.
  - 5. Verify target reset
- 5. Relay

- 1. Inspect relay for foreign material, particularly in disk slots of the damping and electromagnets.
- 2. Verify disk clearance. Verify contact clearance and spring bias.
- Inspect spiral spring convolutions. Inspect disk and contacts for freedom of
  movement and correct travel. Verify tightness of mounting hardware and
  connections. Burnish contacts. Inspect bearings and/or pivots.
- 6. Verify that all settings are in accordance with coordination study or setting sheet supplied by owner.
- 7. Perform as-left tests.

#### **Electrical Tests**

- 1. Perform insulation-resistance test on each circuit-to-frame. Procedures for performing insulation-resistance tests on solid-state relays should be determined from the relay manufacturer's published data.
- 2. Inspect targets and indicators.
  - 1. Determine pickup and dropout of electromechanical targets.
  - 2. Verify operation of all light-emitting diode indicators.
  - 3. Set contrast for liquid-crystal display readouts.

# **Functional Operation**

- 1. 2/62 Timing Relay
  - 1. Determine time delay.
  - 2. Verify operation of instantaneous contacts.
- 2. 21 Distance Relay
  - 1. Determine maximum reach.
  - 2. Determine maximum torque angle.
  - 3. Determine offset.
  - 4. Plot impedance circle.
- 3. 24 Volts/Hertz Relay
  - 1. Determine pickup frequency at rated voltage.

- 2. Determine pickup frequency at a second voltage level.
- 3. Determine time delay.

# 4. 25 Sync Check Relay

- 1. Determine closing zone at rated voltage.
- 2. Determine maximum voltage differential that permits closing at zero degrees.
- 3. Determine live line, live bus, dead line, and dead bus set points.
- 4. Determine time delay.
- 5. Verify dead bus/live line, dead line/live bus and dead bus/dead line control functions.

# 5. 27 Undervoltage Relay

- 1. Determine dropout voltage.
- 2. Determine time delay.
- 3. Determine the time delay at a second point on the timing curve for inverse time relays.

## 6. 32 Directional Power Relay

- 1. Determine minimum pickup at maximum torque angle.
- 2. Determine closing zone.
- 3. Determine maximum torque angle.
- 4. Determine time delay.
- 5. Verify the time delay at a second point on the timing curve for inverse time relays.
- 6. Plot the operating characteristic.

## 7. 40 Loss of Field (Impedance) Relay

- 1. Determine maximum reach.
- 2. Determine maximum torque angle.
- 3. Determine offset.
- 4. Plot impedance circle.

- 8. 46 Current Balance Relay
  - 1. Determine pickup of each unit.
  - 2. Determine percent slope.
  - 3. Determine time delay.
- 9. 46N Negative Sequence Current Relay
  - 1. Determine negative sequence alarm level.
  - 2. Determine negative sequence minimum trip level.
  - 3. Determine maximum time delay.
  - 4. Verify two points on the  $(I_2)^2$ t curve.
- 10. 47 Phase Sequence or Phase Balance Voltage Relay
  - 1. Determine positive sequence voltage to close the normally open contact.
  - 2. Determine positive sequence voltage to open the normally closed contact (undervoltage trip).
  - 3. Verify negative sequence trip.
  - 4. Determine time delay to close the normally open contact with sudden application of 120 percent of pickup.
  - 5. Determine time delay to close the normally closed contact upon removal of voltage when previously set to rated system voltage.
- 11. 49R Thermal Replica Relay
  - 1. Determine time delay at 300 percent of setting.
  - 2. Determine a second point on the operating curve.
  - 3. Determine pickup.
- 12. 49T Temperature (RTD) Relay
  - 1. Determine trip resistance.
  - 2. Determine reset resistance.
- 13. 50 Instantaneous Overcurrent Relay
  - 1. Determine pickup.

- 2. Determine dropout.
- 3. Determine time delay.

#### 14. 51 Time Overcurrent

- 1. Determine minimum pickup.
- 2. Determine time delay at two points on the time current curve.

#### 15. 55 Power Factor Relay

- 1. Determine tripping angle.
- 2. Determine time delay.

## 59 Overvoltage Relay

- 1. Determine overvoltage pickup.
- 2. Determine time delay to close the contact with sudden application of 120 percent of pickup.

## 17. 60 Voltage Balance Relay

- 1. Determine voltage difference to close the contacts with one source at rated voltage.
- 2. Plot the operating curve for the relay.

## 18. 63 Transformer Sudden Pressure Relay

- 1. Determine rate-of-rise or the pickup level of suddenly applied pressure in accordance with manufacturer's published data.
- 2. Verify operation of the 63 FPX seal-in circuit.
- 3. Verify trip circuit to remote operating device.

## 19. 64 Ground Detector Relay

Determine maximum impedance to ground causing relay pickup.

## 20. 67 Directional Overcurrent Relay

- 1. Determine directional unit minimum pickup at maximum torque angle.
- 2. Determine closing zone.
- 3. Determine maximum torque angle.

- 4. Plot operating characteristics.
- 5. Determine overcurrent unit pickup.
- 6. Determine overcurrent unit time delay at two points on the time current curve.

# 21. 79 Reclosing Relay

- 1. Determine time delay for each programmed reclosing interval.
- 2. Verify lockout for unsuccessful reclosing.
- 3. Determine reset time.
- 4. Determine close pulse duration.
- 5. Verify instantaneous overcurrent lockout.

# 22. 81 Frequency Relay

- 1. Verify frequency set points.
- 2. Determine time delay.
- 3. Determine undervoltage cutoff.

#### 23. 85 Pilot Wire Monitor

- 1. Determine overcurrent pickup.
- 2. Determine undercurrent pickup.
- 3. Determine pilot wire ground pickup level.

#### 24. 87 Differential

- 1. Determine operating unit pickup.
- 2. Determine the operation of each restraint unit.
- 3. Determine slope.
- 4. Determine harmonic restraint.
- 5. Determine instantaneous pickup.
- 6. Plot operating characteristics for each restraint.

#### **Control Verification**

Verify that each of the relay contacts performs its intended function in the control scheme including breaker trip tests, close inhibit tests, 86 lockout tests, and alarm functions.

#### **Test Values**

- 1. When not otherwise specified, use manufacturer's recommended tolerances.
- 2. When critical test points are specified, the relay should be calibrated to those specified points even though other test points may be out of tolerance.

# Section 7.9.2

# Protective Relays, Microprocessor-Based

# Visual and Mechanical Inspection

- Record model number, style number, serial number, firmware revision, software revision, and rated control voltage.
- Download all events from the event recorder in filtered and unfiltered mode before
  performing any tests on the relay. Download the sequence-of-events recorder prior to
  testing the relay.
- 3. Verify operation of light-emitting diodes, display, and targets.
- Record passwords for all access levels.
- 5. Clean the front panel and remove foreign material from the case.
- 6. Check tightness of connections.
- 7. Verify that the frame is grounded in accordance with manufacturer's instructions.
- 8. Download settings from the relay. Print a copy of the settings for the report and compare the settings to those specified in the coordination study.

#### **Electrical Tests**

- 1. Perform insulation-resistance tests from each circuit to the grounded frame in accordance with manufacturer's published data.
- 2. Apply voltage or current to all analog inputs and verify correct registration of the relay meter functions.
- 3. Functional Operation
  - Check functional operation of each element used in the protection scheme as described for electromechanical relays.
- 4. Control Verification

- 1. Check operation of all active digital inputs.
- 2. Check all output contacts or SCRs, preferably by operating the controlled device such as circuit breaker, auxiliary relay, or alarm.
- 3. Check all internal logic functions used in the protection scheme.
- 4. Upon completion of testing reset all min/max recorders, fault counters, sequence of events recorder, and all event records.

## Section 7.2

# Transformers, Liquid-Filled

# Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Verify the presence of PCB labeling, if applicable.
- 4. Prior to cleaning the unit, perform as-found tests, if required.
- 5. Clean bushings and control cabinets.
- 6. Verify operation of alarm, control, and trip circuits from temperature and level indicators, pressure relief device, and fault pressure relay, if applicable.
- 7. Verify that cooling fans and/or pumps operate correctly.
- 8. Inspect bolted electrical connections for high resistance using one of the following methods:
  - Use of a low-resistance ohmmeter.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torquewrench method in accordance with manufacturer's published data or NETA MTS 2005, Table 100.12.
  - 3. Perform a thermographic survey.
- 9. Verify correct liquid level in tanks and bushings.
- 10. Verify that positive pressure is maintained on gas-blanketed transformers.
- 11. Perform inspections and mechanical tests as recommended by the manufacturer.

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- 14. Perform as-left tests.
- 15. Verify de-energized tap-changer position is left as specified.

#### **Electrical Tests**

- 1. Perform insulation-resistance tests, winding-to-winding and each winding-to-ground. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NEA MTS 2005, Table 100.5. Calculate polarization index.
- 2. Perform turns-ratio tests at the designated tap position.
- 3. Perform insulation power-factor or dissipation-factor tests on all windings in accordance with test equipment manufacturer's published data.
- 4. Perform excitation-current tests in accordance with the test equipment manufacturer's published data.
- 5. Measure the resistance of each winding at the designated tap position.
- 6. If the core ground strap is accessible, remove and measure the core insulation resistance at 500 volts dc.
- 7. Remove a sample of insulating liquid in accordance with ASTM D 923. The sample shall be tested for the following.
  - 1. Dielectric breakdown voltage: ASTM D 877 and/or ASTM D 1816
  - 2. Acid neutralization number: ANSI/ASTM D 974
  - 3. Specific gravity: ANSI/ASTM D 1298
  - 4. Interfacial tension: ANSI/ASTM D 971 or ANSI/ASTM D 2285
  - 5. Color: ANSI/ASTM D 1500
  - 6. Visual Condition: ASTM D 1524
  - 7. Water in insulating liquids: ASTM D 1533. (Required on 25 kV or higher voltages and on all silicone-filled units.)
  - 8. Measure power factor or dissipation factor in accordance with ASTM D 924.
- 8. Remove a sample of insulating liquid in accordance with ASTM D 3613 and perform dissolved-gas analysis (DGA) in accordance with ANSI/IEEE C57.104 or ASTM D3612.
- 9. Test the transformer neutral grounding impedance devices, if applicable.

#### 3.1 Test Values - Visual and Mechanical

- 1. Alarm, control, and trip circuits from temperature and level indicators as well as pressure relief device and fault pressure relay should operate within manufacturer's recommendations for their specified settings. (7.2.2.1.6)
- 2. Cooling fans and/or pumps should operate. (7.2.2.1.7)
- Compare bolted connection resistance values to values of sim lar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value. (7.2.2.1.8.1)
- 4. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.2.2.1.8.2)
- 5. Results of the thermographic survey shall be in accordance with Section 9. (7.2.2.1.8.3)
- 6. Liquid levels in the transformer tanks and bushings should be within indicated tolerances. (7.2.2.1.9)
- 7. Positive pressure (2 psig) should be indicated on pressure gauge for gas-blanketed transformers. (7.2.2.1.10)

#### 3.2 Test Values - Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value.
- 2. Minimum insulation-resistance values of transformer insulation should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.5. Values of insulation resistance less than this table or manufacturer's recommendations should be investigated. The polarization index shall be compared to previously obtained results and should not be less than 1.0.
- 3. Turns-ratio test results should not deviate by more than one-half percent from either the adjacent coils or the calculated ratio.
- 4. Maximum power-factor/dissipation-factor values of liquid-filled transformers corrected to 20°C should be in accordance with the transformer manufacturer's published data. Representative values are indicated in Table 100.3.
- 6. Typical excitation-current test data pattern for a three-legged core transformer is two similar current readings and one lower current reading.
- Temperature corrected winding-resistance values should compare within one percent of previously obtained results.

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- 8. Core insulation values should be comparable to previously obtained results but not less than one megohm at 500 volts dc.
- 10. Insulating liquid values should be in accordance with Table 100.4.
- 11. Evaluate results of dissolved-gas analysis in accordance with ANSI/IEEE Standard C57.104.
- 14. Compare grounding impedance device values to previously obtained results. In the absence of previously obtained values, compare obtained values to manufacturer's published data.

# Section 9

# Thermographic Survey

As a minimum, equipment to be inspected shall include all current-carrying devices.

# Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Remove all necessary covers prior to thermographic inspection. Use appropriate caution, safety devices, and personal protective equipment.

# Thermographic Survey Report

Provide a report which includes the following:

- 1. Description of equipment to be tested.
- 2. Discrepancies.
- 3. Temperature difference between the area of concern and the reference area.
- 4. Probable cause of temperature difference.
- 5. Areas inspected. Identify inaccessible and/or unobservable areas and/or equipment.
- Identify load conditions at time of inspection.
- 7. Provide photographs and/or thermograms of the deficient area.
- 8. Provide recommended action for repair.

#### **Test Parameters**

1. Inspect distribution systems with imaging equipment capable of detecting a minimum temperature difference of 1°C at 30°C.

- 2. Equipment shall detect emitted radiation and convert detected radiation to visual signal.
- 3. Thermographic surveys should be performed during periods of maximum possible loading. Refer to ANSI/NFPA 70B, Section 20.17.

#### **Test Results**

ggested actions based on temperature rise can be found in Table 100 of NETA MTS -2005

# Section 7.1

# Switchgear and Switchboard Assemblies

# Visual and Mechanical Inspection

- 1. Inspect physical, electrical, and mechanical condition including evidence of moisture or corona.
- 2. Inspect anchorage, alignment, grounding, and required area clearances.

3.

- 4. Clean the unit.
- Verify that fuse and/or circuit breaker sizes and types correspond to drawings and coordination study as well as to the circuit breaker's address for microprocessorcommunication packages.
- 6. Verify that current and voltage transformer ratios correspond to drawings.
- 7. Inspect bolted electrical connections for high resistance. Perform a thermographic survey of the low voltage switchgear while the equipment is on line, and at least 2 weeks prior to the maintenance and test work.
- 8. Confirm correct operation and sequencing of electrical and mechanical interlock systems.
  - 1. Attempt closure on locked-open devices. Attempt to open locked-closed devices.
  - 2. Make key exchange with all devices included in the interlock scheme as applicable.
- 9. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 10. Verify correct barrier and shutter installation and operation.
- 11. Exercise all active components.
- 12. Inspect mechanical indicating devices for correct operation.

- 13. Verify that filters are in place and/or vents are clear.
- 14. Inspect control power transformers.
  - 1. Inspect for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring, and overall general condition.
  - 2. Verify that primary and secondary fuse ratings or circuit breakers match drawings.
  - Verify correct functioning of drawout disconnecting and grounding contacts and interlocks.
- Perform as-left tests.

#### **Electrical Tests**

- 1. Perform resistance measurements through bolted electrical connections with a low-resistance ohmmeter in accordance with Section 7.1.1, if applicable.
- 2. Perform insulation—resistance tests for one minute on each bus section, phase-to-phase and phase-to-ground. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NETA MTS 2005, Table 100.1
- 3. Control Power Transformers
  - 1. Perform insulation-resistance tests. Perform measurements from winding—to-winding and each winding-to-ground. Test voltages shall be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NETA MTS 2005, Table 100.1
  - Verify correct function of control transfer relays located in switchgear with multiple power sources.
- 4. Verify operation of switchgear/switchboard heaters and their controller, if applicable.
- 5. Perform lost bus transfer tests if applicable.

#### **Test Values**

#### 3.2 Test Values – Electrical

Insulation-resistance values of bus insulation should be in accordance with manufacturer's
published data. In the absence of manufacturer's published data, use NEA MTS 2005,
Table 100.1. Values of insulation resistance less than this table or manufacturer's
recommendations should be investigated.

- 2. Minimum insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.
- 3. Control Power Transformers
  - Insulation-resistance values of control power transformers should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.5. Values of insulation resistance less than this table or manufacturer's recommendations should be investigated.
  - 2. Control transfer relays should perform as designed.
- 4. Heaters should be operational.

# Section 7.17

# Adjustable-Speed Drive Systems

# 1. Visual and Mechanical Inspection

- Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Prior to cleaning the unit, perform as-found tests.
- 4. Clean the unit.
- 5. Ensure vent path openings are free from debris and that heat transfer surfaces are not contaminated by oil, dust, or dirt.
- Verify correct connections of circuit boards, wiring, disconnects, and ribbon cables.
- 7. Motor running protection
  - 1. Compare drive overcurrent set points with motor full-load current rating to verify correct settings.
  - 2. If drive is used to operate multiple motors, compare individual overload element ratings with motor full-load current ratings.
  - 3. Apply minimum and maximum speed set points. Confirm set points are within limitations of the load coupled to the motor.

- 8. Inspect bolted electrical connections for high resistance using one of the following methods:
  - 1. Use of a low-resistance ohmmeter.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method in accordance with manufacturer's published data or Table 100.12.
  - 3. Perform a thermographic survey.
- 9. Verify correct fuse sizing in accordance with manufacturer's published data.
- 10. Perform as-left tests.

#### 2. Electrical Tests

- 1. Perform resistance measurements through bolted connections with low-resistance ohmmeter, if applicable.
- 2. Test the motor overload relay elements by injecting primary current through the overload circuit and monitoring trip time of the overload element.
- 3. Test input circuit breaker by primary injection.
- 4. Perform insulation resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components, follow manufacturer's recommendation.
- 5. Test for the following parameters in accordance with relay calibration procedures outlined in Section 7.9 or as recommended by the manufacturer:
  - 1. Input phase loss protection
  - 2. Input overvoltage protection
  - 3. Output phase rotation
  - 4. Overtemperature protection
  - 5. DC overvoltage protection
  - 6. Overfrequency protection
  - 7. Drive overload protection
  - 8. Fault alarm outputs

- 6. Perform continuity tests on bonding conductors in accordance with Section 7.13.
- Perform operational tests by initiating control devices.
  - 1. Slowly vary drive speed between minimum and maximum. Observe motor and load for unusual noise or vibration.
  - 2. Verify operation of drive from remote start/stop and speed control signals.

#### 3. Test Values

# 3.1 Test Values – Visual and Mechanical

- Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.17.1.8.1)
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.17.1.8.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.17.1.8.3)

#### 3.2 Test Values – Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value.
- 2. Overload test trip times at 300 percent of overload element rating should be in accordance with manufacturer's published time-current curve.
- 3. Input circuit breaker test results shall be in accordance with Section 7.6.
- 4. Insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.
- 5. Relay calibration test results shall be in accordance with Section 7.9.
- 6. Continuity of bonding conductors shall be in accordance with Section 7.13.
- 7. Control devices should perform in accordance with system requirements.

# **Section 7.22.3**

# **Emergency Systems, Automatic Transfer Switches**

# 1. Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, grounding, and required clearances.
- 3. Prior to cleaning the unit, perform as-found tests.
- 4. Clean the unit.
- 5. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 6. Verify that manual transfer warnings are attached and visible.
- 7. Verify tightness of all control connections.
- 8. Inspect bolted electrical connections for high resistance using one of the following methods:
  - 1. Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method in accordance with manufacturer's published data or Table 100.12.
  - 2. Perform a thermographic survey in accordance with Section 9.
- 9. Perform manual transfer operation.
- 10. Verify positive mechanical interlocking between normal and alternate sources.
- Perform as-left tests.

## 2. Electrical Tests

- 1. Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable, in accordance with Section 7.22.3.1.
- 2. Perform insulation resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components or for control devices that cannot tolerate the applied voltage, follow manufacturer's recommendation.
- 3. Perform a contact/pole-resistance test.
- 4. Verify settings and operation of control devices.
- 5. Calibrate and set all relays and timers in accordance with Section 7.9.

#### 6. Perform automatic transfer tests:

- 1. Simulate loss of normal power.
- 2. Return to normal power.
- 3. Simulate loss of emergency power.
- 4. Simulate all forms of single-phase conditions.

# 7. Verify correct operation and timing of the following functions:

- 1. Normal source voltage-sensing relays.
- 2. Engine start sequence.
- 3. Time delay upon transfer.
- Alternate source voltage-sensing relays.
- 5. Automatic transfer operation.
- Interlocks and limit switch function.
- 7. Time delay and retransfer upon normal power restoration.
- 8. Engine cool down and shutdown feature.

#### 3. Test Values

#### 3.1 Test Values – Visual and Mechanical

- 1. Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.22.3.1.8.1)
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.22.3.1.8.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.22.3.1.8.3)

#### 3.2 Test Values – Electrical

 Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value.

- 2. Insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two meghoms.
- 3. Microhm or millivolt drop values should not exceed the high levels of the normal range as indicated in the manufacturer's published data. If manufacturer's data is not available, investigate values that deviate from adjacent poles or similar switches by more than 50 percent of the lowest value.
- 4. Control devices should operate in accordance with manufacturer's published data.
- 5. Relay test results shall be in accordance with Section 7.9.
- 6. Automatic transfers should operate in accordance with manufacturer's design.
- 7. Operation and timing should be in accordance with manufacturer's and/or system design requirements.

# ATTACHMENT B SUPPLIES OR SERVICES AND PRICES/COSTS All pricing is to be Normal working hours unless otherwise stated

# Old East Sub-Station & Load Center #1

001.	Perform Allis Chalmers & Westinghouse 208 V Breaker Annual Maintenance: Load Center # 1 208 V breakers in service, to be secondary tested, meggered, ductored, cleaned and lubricated per NETA MTS guidelines. Outages will be required.	\$ \$	X	(LA25) 11 (LA75) 1	\$
	Perform Allis Chalmers 5 KV Circuit Breaker Annual Inspection (Load Center #1): Medium voltage air breakers, to be removed, hi pot and megaword, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours.	\$ \$	x x	(1200A) 1 Primary Incoming (1200A) 7 Secondary Outgoing	\$ \$
002.	208V main above A/C 100HP Starters service, to be secondary tested, meggered, ductored, cleaned and lubricated per NETA MTS weekday work as outages will be required.	\$	X	(Starters) 7	\$
003.	Perform Allis Chalmers 15 kV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours.	\$	X	4	\$

004.	Perform Allis Chalmers 5 KV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and megaword, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours.	\$ x	22	\$
005.	Perform Old East Sub-Station DC System Annual Inspection and Maintenance of relays on the Allis Chalmers 15KV breakers in the East Sub. Sta. weekday work as an outage is not anticipated	\$ X	1	\$
006.	Perform Allis Chalmers 15K to 4160v (PCB's) Transformers Annual Electrical Inspection & Testing: Transformers to be megaword, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours	\$ x	4	\$
007.	Perform Allis Chalmers (PCB's) 5k to 208v Transformers Annual Electrical Inspection & Testing: L/C # 1 Transformers to be megaword, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$ x	1	\$
008.	Test and Calibrations for settings on 5 KV & 15 KV relays and doc. all test results (See chart for relay list).	\$ x	95	\$

# Old West Refrigeration Plant Sub-Station S/W Gear

	Services	<u>Unit Price</u>	8 1	Estimated Quantity*	Total Price
009.	Perform Allis Chalmers 480 VAC Breaker Triennial Maintenance:  480 V breakers in service, to be secondary tested, meggered,	2			
	ductored, cleaned and lubricated per NETA MTS guidelines, overtime work as outages will be required.	\$	X	16	\$
010.	Perform Allis Chalmers 480 VAC Breaker Triennial Maintenance:  480V main and tie breakers and spares, scope as above except weekday work as outages will not be needed.	\$	X	7	\$

011.	Perform I-T-E 15 kV Circuit Breaker Annual Inspection:  Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	16	= \$
	Perform I-T-E 5 kV Circuit Breaker Annual Inspection:			
012.	Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	35	= \$
013.	Blank			
		\$ x		= \$
014.	Perform15K to 4160v Transformers Annual Electrical Inspection & Testing:  Transformers to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours Perform 15k to 480v Transformers Annual Electrical Inspection & Testing:	\$ X	2	= \$

015.	Transformers to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination,	G 64	117	I	
	dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$	Х	2	= \$
016.	Perform Test and Calibrations for settings on 5 KV & 15 KV relays and doc. all test results (See chart for relay list).	\$	X	189	= \$

# New West Refrigeration Plant Expansion Sub-Station

N.			1 3		
017.	Perform Cutler Hammer 480 VAC Breaker Triennial Maintenance: 480 V breakers in service, to be secondary tested, meggered, ductored, cleaned and lubricated per NETA MTS guidelines, Reg. hours work as outages will be requireded.	\$	X	(3) DS II 840 800 amps Frame breaker	= \$
018.	480V main and tie breakers and spares, scope as above except weekday work as outages will not be needed.	\$	X	(3) DS II 840 4000 amps Frame breaker	= \$
019.	Perform Cutler Hammer 15 kV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ \$	X	2000R amps (17)150	= \$ = \$
020.	Perform Cutler Hammer 5 kV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as required during normal working hours	\$ \$	X	1200amps (3) 50- vcp-50c	= \$ = \$
021.	Perform West Refrigeration Plant DC System Annual Inspection and Maintenance of relays on the 5 and Cutler Hammer 15KV breakers in the west plant, including the new solid state units on the Cutler Hammer 5KV gear, weekday work as an outage is not anticipated	\$	х	106	= \$

022.	Perform15K to 4160v Transformers Annual Electrical Inspection & Testing: Transformers Cutler Hammer to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as required during normal working hours	\$ х	4	= \$
023.	Perform 15k to 480v Transformers Annual Electrical Inspection & Testing: Transformers Cutler Hammer to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$ х	2	=\$
024.	Perform Test and Calibrations for settings on 5 KV & 15 KV relays and doc. all test results (See chart for relay list).	\$ Х	89	=\$
025.	Perform Test and Calibrations for settings on 480v Culter Hammer 9000 VFD's	\$ x	3	=\$
026.	Perform Test and Calibrations for settings on 480v Culter Hammer Motor Control Center	\$ x	1	=\$
027	Perform Test and Calibrations for settings on 4160v Culter Hammer Motor Control Center Pumps	\$ X	4	=\$

# New East Sub-Station and Emergency Systems, Swicth-Gear for Automatic Generator Transfer.(Load Center 2 & 3)

028.	Perform Annual ASCO 7000 Series Transfer SW 480 VAC Maintenance: Emergency Systems, 800 Amp Automatic Transfer Switch,	\$ X	(1) 800amp Transfer Sw	\$
029.	480V breakers in 800 Amp Service, tighted, tested & cleaned and per NEA MTS guidelines, work will be done Reg. hours outages will be needed.	\$ X	(1) 800amp Panel Board	\$
030.	Perform Maintenance: Emergency Systems, Switch gear for Automatic Generator power, to Transfer Switch's 2000amp C/H	\$ X	(2) 2000 amp Trans./SW	\$
031.	Cutler Hammer 480V Circuit Breakers Annual Inspection: DSII -608 800amp voltage air breakers, to be removed, tested by means of portable hipot or megohmmeter, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	(4) 800 amp DSII Breakers	\$

032.	Perform Cutler Hammer 208VCircuit Breaker Annual Inspection: DSII -620 2000amp 208 voltage air breakers, to removed, hi pot and megaword, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	(6) 2000amp Breakers	\$
033.	Perform West Plant DC System Annual Inspection; Maintenance of relays on the Cutler HammerDSII - 620 800amp 208V breakers n the New East plant, including the new solid state units on the Cutler Hammer 208V gear, weekday work as an outage is not anticipated	\$ X	(35) 800amp Breakers	\$
034.	Perform 480v to 208/120v KVA 500 Transformers Annual Electrical Inspection & Testing: Maintenance: Emergency Systems, Swicth Gear for Automatic Generator power, to Transfer Switchs Transformers Cutler Hammer to be megaword, turns ratio tested, Dry Type, with outages as needed during normal working hours	\$ X	2	\$

035.	Perform 4160v to 208/120V KVA500/750 Transformers Annual Electrical Inspection & Testing: Transformers Cutler Hammer to be megaword, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$ X	4	\$
036.	Perform Test and Calibrations for settings on 208v gear relays and doc. all test results.  A. (1) C/H I Q analizer Gen SW. Gear.  B. (2) C/H Breaker Monitor M/P 3000  C. (4) C/H (IQDP) 4000  Main Load Metering	\$ X	7	\$

# General Overhead, Contract Maintenance and Option Years

037.	General Overhead and Profit to fulfill contract.	\$
038.	Total Contract Value for Base Year	\$

Please also fill in Section B, Page 2 & 3 of this solicitation.

WD 05-2103 (Rev.-4) was first posted on www.wdol.gov on 07/10/2007

\*

REGISTER OF WAGE DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARIMENT OF LABOR

EMPLOYMENT STANDARDS ADMINISTRATION

WAGE AND HOUR DIVISION

WASHINGTON D.C. 20210

Wage Determination No.: 2005-2103

Revision No.: 4

Date Of Revision: 07/05/2007

William W.Gross Director Division of Wage Determinations

States: District of Columbia, Maryland, Virginia

Area: District of Columbia Statewide

Maryland Counties of Calvert, Charles, Frederick, Montgomery, Prince George's, St

Mary's

Virginia Counties of Alexandria, Arlington, Fairfax, Falls Church, Fauquier, King

George, Loudoun, Prince William, Stafford

#### \*\*Fringe Benefits Required Follow the Occupational Listing\*\*

OCCUPATION CODE - TITLE	MINIMUM WAGE	RATE
01000 - Administrative Support And Clerical Occupations		
01011 - Accounting Clerk I		13.79
01012 - Accounting Clerk II		15.49
01013 - Accounting Clerk III		18.43
01020 - Administrative Assistant		23.59
01040 - Court Reporter		18.43
01051 - Data Entry Operator I		12.67
01052 - Data Entry Operator II		13.82
01060 - Dispatcher, Motor Vehicle		16.50
01070 - Document Preparation Clerk		13.29
01090 - Duplicating Machine Operator		13.29
01111 - General Clerk I		13.72
01112 - General Clerk II		15.32
01113 - General Clerk III		18.74
01120 - Housing Referral Assistant		21.66
01141 - Messenger Courier		10.23
01191 - Order Clerk I		14.74
01192 - Order Clerk II		16.29
01261 - Personnel Assistant (Employment) I		15.60
01262 - Personnel Assistant (Employment) II		18.43
01263 - Personnel Assistant (Employment) III		21.66
01270 - Production Control Clerk		21.29
01280 - Receptionist		12.72
01290 - Rental Clerk		15.60
01300 - Scheduler, Maintenance		15.60
01311 - Secretary I		17.03
01312 - Secretary II		18.39
01313 - Secretary III		21.66
01320 - Service Order Dispatcher		15.82
01410 - Supply Technician		23.59
01420 - Survey Worker		18.43
01531 - Travel Clerk I		12.07
01532 - Travel Clerk II		13.01

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01533	- Travel Clerk III	13.99
01611	- Word Processor I	13.76
01612	- Word Processor II	15.60
01613	- Word Processor III	18.43
05000 -	Automotive Service Occupations	
	- Automobile Body Repairer, Fiberglass	25.26
	- Automotive Electrician	21.37
05040	- Automotive Glass Installer	20.14
05070	- Automotive Worker	20.14
05110	- Mobile Equipment Servicer	17.31
05130	- Motor Equipment Metal Mechanic	22.53
05160	- Motor Equipment Metal Worker	20.14
05190	- Motor Vehicle Mechanic	22.53
05220	- Motor Vehicle Mechanic Helper	16.81
	- Motor Vehicle Upholstery Worker	19.66
	- Motor Vehicle Wrecker	20.14
05310	- Painter, Automotive	21.37
	- Radiator Repair Specialist	20.14
	- Tire Repairer	14.43
	- Transmission Repair Specialist	22.53
	Food Preparation And Service Occupations	
	- Baker	13.18
	- Cook I	11.97
	- Cook II	13.28
	- Dishwasher	9.76
	- Food Service Worker	10.25
	- Meat Cutter	16.07
	- Waiter/Waitress	8.59
	Furniture Maintenance And Repair Occupations	1000 200
	- Electrostatic Spray Painter	18.05
995333763335A	- Furniture Handler	12.78
	- Furniture Refinisher	18.39
	- Furniture Refinisher Helper	14.11
	- Furniture Repairer, Minor	16.31
	- Upholsterer	18.05
	General Services And Support Occupations	0 67
	- Cleaner, Vehicles	9.67
	- Elevator Operator - Gardener	9.79 15.70
	- Housekeeping Aide - Janitor	10.89
	- Laborer, Grounds Maintenance	12.07
	- Maid or Houseman	10.84
	- Pruner	11.37
	- Tractor Operator	14.19
	- Trail Maintenance Worker	12.07
	- Window Cleaner	11.31
	Health Occupations	
	- Ambulance Driver	16.06
	- Breath Alcohol Technician	17.67
	- Certified Occupational Therapist Assistant	20.31
	- Certified Physical Therapist Assistant	19.99
	- Dental Assistant	16.90
12025	- Dental Hygienist	40.68
	- EKG Technician	24.34
12035	- Electroneurodiagnostic Technologist	24.34
12040	- Emergency Medical Technician	17.67
12071	- Licensed Practical Nurse I	18.60
	- Licensed Practical Nurse II	20.82
12073	- Licensed Practical Nurse III	21.79

		Page 3 of 9
12100	- Medical Assistant	14.23
	- Medical Laboratory Technician	18.04
	- Medical Record Clerk	14.96
	- Medical Record Technician	16.67
	- Medical Transcriptionist	16.46
	- Nuclear Medicine Technologist	28.93
	- Nursing Assistant I	9.75
	- Nursing Assistant II	10.96
	- Nursing Assistant III	12.99
	- Nursing Assistant IV	14.58
	- Optical Dispenser	16.67
	- Optical Technician	14.41
	- Pharmacy Technician	15.75
	- Phlebotomist	14.58
12305	- Radiologic Technologist	27.61
12311	- Registered Nurse I	24.92
12312	- Registered Nurse II	31.22
12313	- Registered Nurse II, Specialist	31.22
12314	- Registered Nurse III	37.77
12315	- Registered Nurse III, Anesthetist	37.77
12316	- Registered Nurse IV	45.28
12317	- Scheduler (Drug and Alcohol Testing)	18.04
	Information And Arts Occupations	
	- Exhibits Specialist I	18.55
	- Exhibits Specialist II	23.33
	- Exhibits Specialist III	28.11
	- Illustrator I	18.73
	- Illustrator II	23.42
	- Illustrator III	28.82
	- Librarian	25.45
	- Library Aide/Clerk	12.52
	- Library Information Technology Systems Administrator	22.99
	- Library Technician	17.88
	- Media Specialist I	16.58
	- Media Specialist II - Media Specialist III	18.55
	- Media Specialist III - Photographer I	14.67
	- Photographer II	17.18
	- Photographer III	21.52
	- Photographer IV	26.05
	- Photographer V	29.15
	- Video Teleconference Technician	16.58
	Information Technology Occupations	
	- Computer Operator I	16.72
	- Computer Operator II	18.71
	- Computer Operator III	20.86
14044	- Computer Operator IV	23.18
14045	- Computer Operator V	25.66
	- Computer Programmer I (1)	21.60
	- Computer Programmer II (1)	26.37
	- Computer Programmer III (1)	27.62
	- Computer Programmer IV (1)	27.62
	- Computer Systems Analyst I (1)	27.62
	- Computer Systems Analyst II (1)	27.62
	- Computer Systems Analyst III (1)	27.62
	- Peripheral Equipment Operator	16.72
	- Personal Computer Support Technician	23.18
	Instructional Occupations	24 20
	- Aircrew Training Devices Instructor (Non-Rated) - Aircrew Training Devices Instructor (Rated)	34.39 42.72
12070	- Alletew Italining Devices Instructor (Ratea)	44.14

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15030	- Air Crew Training Devices Instructor (Pilot)	50.66
	- Computer Based Training Specialist / Instructor	31.26
	- Educational Technologist	29.09
15070	- Flight Instructor (Pilot)	50.66
	- Graphic Artist	24.95
15090	- Technical Instructor	23.87
	- Technical Instructor/Course Developer	29.19
	- Test Proctor	19.04
	- Tutor	19.04
	Laundry, Dry-Cleaning, Pressing And Related Occupa	
	- Assembler	8.95
	- Counter Attendant	8.95
	- Dry Cleaner	12.21
	- Finisher, Flatwork, Machine	8.95
	- Presser, Hand	8.95
	- Presser, Machine, Drycleaning	8.95
	- Presser, Machine, Shirts	8.95
	- Presser, Machine, Wearing Apparel, Laundry	8.95
	- Sewing Machine Operator - Tailor	12.30
	- Washer, Machine	13.01
	Machine Tool Operation And Repair Occupations	9.81
	- Machine-Tool Operator (Tool Room)	10.05
	- Tool And Die Maker	18.95
	Materials Handling And Packing Occupations	23.05
	- Forklift Operator	17.26
	- Material Coordinator	21.29
	- Material Expediter	21.29
	- Material Handling Laborer	12.65
	- Order Filler	13.21
	- Production Line Worker (Food Processing)	17.28
	- Shipping Packer	14.46
	- Shipping/Receiving Clerk	14.46
	- Store Worker I	10.44
21150	- Stock Clerk	14.35
	- Tools And Parts Attendant	17.26
21410	- Warehouse Specialist	17.26
	Mechanics And Maintenance And Repair Occupations	
	- Aerospace Structural Welder	25.68
23021	- Aircraft Mechanic I	24.46
23022	- Aircraft Mechanic II	25.68
23023	- Aircraft Mechanic III	26.97
	- Aircraft Mechanic Helper	16.61
	- Aircraft, Painter	23.42
	- Aircraft Servicer	18.71
	- Aircraft Worker	19.90
	- Appliance Mechanic	20.60
	- Bicycle Repairer	14.43
	- Cable Splicer	24.98
	- Carpenter, Maintenance	20.36
	- Carpet Layer	18.70
10	- Electrician, Maintenance	25.37
	- Electronics Technician Maintenance I - Electronics Technician Maintenance II	22.08
	- Electronics Technician Maintenance II - Electronics Technician Maintenance III	23.44
	- Fabric Worker	24.70
	- Fire Alarm System Mechanic	17.90
	- Fire Extinguisher Repairer	21.46 16.50
	- Fuel Distribution System Mechanic	22.81
	- Fuel Distribution System Mechanic	19.38
	operator	17.50

			2	5
	23370	- General Maintenance Worker	20.5	91
		- Ground Support Equipment Mechanic	24.4	
		- Ground Support Equipment Servicer	18.	
		- Ground Support Equipment Worker	19.9	
		- Gunsmith I	16.	
		- Gunsmith II	19.1	
		- Gunsmith III	21.4	
		- Heating, Ventilation And Air-Conditioning Mechanic	21.9	
		- Heating, Ventilation And Air Contditioning Mechanic		
	23.13	nearing, ventifation and air contaitioning medianic	(Research Facil.	TCA)
		- Heavy Equipment Mechanic	21	16
		- Heavy Equipment Operator	21.4	
		- Instrument Mechanic		
			21.4	
		- Laboratory/Shelter Mechanic	20.3	
		- Laborer	14.3	
		- Locksmith	19.	
		- Machinery Maintenance Mechanic	21.	
		- Machinist, Maintenance	21.	
		- Maintenance Trades Helper	15.3	
		- Metrology Technician I	21.4	
		- Metrology Technician II	22.0	
		- Metrology Technician III	23.	
		- Millwright	23.3	
		- Office Appliance Repairer	21.0	
		- Painter, Maintenance	20.3	
		- Pipefitter, Maintenance	22.	
		- Plumber, Maintenance	20.9	99
		- Pneudraulic Systems Mechanic	21.4	46
	23850	- Rigger	21.4	46
	23870	- Scale Mechanic	19.3	18
	23890	- Sheet-Metal Worker, Maintenance	21.4	46
	23910	- Small Engine Mechanic	20.0	05
	23931	- Telecommunications Mechanic I	25.2	22
	23932	- Telecommunications Mechanic II	26.	58
	23950	- Telephone Lineman	24.4	43
	23960	- Welder, Combination, Maintenance	21.4	46
	23965	- Well Driller	21.4	46
	23970	- Woodcraft Worker	21.4	46
	23980	- Woodworker	16.	50
		Personal Needs Occupations		
	24570	- Child Care Attendant	11.	58
	24580	- Child Care Center Clerk	16.3	15
	24610	- Chore Aide	9.	58
	24620	- Family Readiness And Support Services Coordinator	12.	
		- Homemaker	16.	
	25000 -	Plant And System Operations Occupations		
		- Boiler Tender	24.9	98
		- Sewage Plant Operator	20.2	
		- Stationary Engineer	24.9	
		- Ventilation Equipment Tender	17.	
		- Water Treatment Plant Operator	20.2	
333		Protective Service Occupations	2011	
-		- Alarm Monitor	17.0	66
		- Baggage Inspector	11.9	
		- Corrections Officer	19.8	
		- Court Security Officer	23.2	
		- Detection Dog Handler	17.0	
		- Detection Dog Handler - Detention Officer		
		- Firefighter	19.8	
		- Guard I	22.3	
	2/101	- Guaru 1	11.	) I

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27102	- Guard II			17.66
27131	- Police Officer I			23.94
27132	- Police Officer II			26.60
28000 -	Recreation Occupations			
28041	- Carnival Equipment Operator			12.35
28042	- Carnival Equipment Repairer			13.30
28043	- Carnival Equpment Worker			8.40
28210	- Gate Attendant/Gate Tender			13.01
	- Lifeguard			11.59
28350	- Park Attendant (Aide)			14.56
28510	- Recreation Aide/Health Facility Attendant			10.62
	- Recreation Specialist			18.04
	- Sports Official			11.59
	- Swimming Pool Operator			16.85
	Stevedoring/Longshoremen Occupational Services			
	- Blocker And Bracer			20.55
	- Hatch Tender			20.55
	- Line Handler			20.55
	- Stevedore I			19.18
	- Stevedore II			21.64
	Technical Occupations			
	- Air Traffic Control Specialist, Center (HFO) (2)			34.71
	- Air Traffic Control Specialist, Station (HFO) (2			23.94
	- Air Traffic Control Specialist, Terminal (HFO) (	2)		26.36
	- Archeological Technician I			17.06
	- Archeological Technician II			19.03
	- Archeological Technician III			23.76
	- Cartographic Technician			24.85
	- Civil Engineering Technician			22.19
	- Drafter/CAD Operator I			17.92
	- Drafter/CAD Operator II - Drafter/CAD Operator III			20.06
	- Drafter/CAD Operator IV			22.36 27.51
	- Engineering Technician I			20.19
	- Engineering Technician II		56	22.67
	- Engineering Technician III			25.37
	- Engineering Technician IV			31.43
	- Engineering Technician V			38.44
	- Engineering Technician VI			46.51
	- Environmental Technician			21.36
	- Laboratory Technician			22.36
	- Mathematical Technician			26.31
30361	- Paralegal/Legal Assistant I			20.03
	- Paralegal/Legal Assistant II			24.82
	- Paralegal/Legal Assistant III			30.35
	- Paralegal/Legal Assistant IV			36.73
30390	- Photo-Optics Technician			24.85
30461	- Technical Writer I		20.69	
30462	- Technical Writer II			25.30
30463	- Technical Writer III			30.61
	- Unexploded Ordnance (UXO) Technician I			22.06
	- Unexploded Ordnance (UXO) Technician II			26.69
	- Unexploded Ordnance (UXO) Technician III			31.99
	- Unexploded (UXO) Safety Escort			22.06
	- Unexploded (UXO) Sweep Personnel			22.06
	- Weather Observer, Combined Upper Air Or Surface	Programs	(2)	22.14
	- Weather Observer, Senior (2)			23.98
	Transportation/Mobile Equipment Operation Occupati	ons		33 22
	- Bus Aide			11.99
31030	- Bus Driver			17.54

31043	- Driver Courier	12.71
31260	- Parking and Lot Attendant	9.06
31290	- Shuttle Bus Driver	13.89
31310	- Taxi Driver	13.98
31361	- Truckdriver, Light	13.89
31362	- Truckdriver, Medium	17.09
31363	- Truckdriver, Heavy	18.40
31364	- Truckdriver, Tractor-Trailer	18.40
99000 -	Miscellaneous Occupations	
99030	- Cashier	10.03
99050	- Desk Clerk	10.45
99095	- Embalmer	21.77
99251	- Laboratory Animal Caretaker I	10.47
99252	- Laboratory Animal Caretaker II	10.85
99310	- Mortician	27.25
99410	- Pest Controller	14.54
99510	- Photofinishing Worker	11.59
99710	- Recycling Laborer	15.73
99711	- Recycling Specialist	18.72
99730	- Refuse Collector	14.01
99810	- Sales Clerk	11.87
99820	- School Crossing Guard	11.37
	- Survey Party Chief	19.76
99831	- Surveying Aide	12.28
99832	- Surveying Technician	18.78
99840	- Vending Machine Attendant	12.61
99841	- Vending Machine Repairer	16.37
99842	- Vending Machine Repairer Helper	12.61

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$3.16 per hour or \$126.40 per week or \$547.73 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year, New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

- 1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)
- 2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will parn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your

regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiar, materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiar, materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordance, explosives, and incendiary material differential pay.

#### \*\* UNIFORM ALLOWANCE \*\*

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona file collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "vash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

The duties of employees under job titles listed are those lescribed in the "Service Contract Act Directory of Occupations", Fifth Edition, April 2006, unless otherwise indicated. Copies of the Directory are available on the Internet. A links to the Directory may be found on the WHD home page at http://www.dol.gov/esa/whd/ or through the Wage Determinations On-Line (WDOL) Web site at http://wdol.gov/.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form

1444 (SF 1444)}

#### Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary vages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, an 1/or fringe benefits shall be retroactive to the commencement date of the contract. (See Section 4.6 (C)(vi)) When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the  $n \ge d$  for a conformed occupation) and computes a proposed rate).
- 2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalenc, (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.3. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour decision to the contractor.
- 6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

#### ATTACHMENT D

## AOC PAST PERFORMANCE QUESTION INAIRE RFP No. 080040

# ANNUAL MAINTENANCE FOR ELECTRICAL EQUIPMENT, U.S. CAPITOL POWER PLANT, WASHINGTON, D.C.

The company listed below is preparing an offer on the above projec for the Architect of the Capitol, Washington, DC. Your name has been provided as a customer reference regarding performance under a past contract with your agency/company. Your comments are considered Source Selection Sensitive, therefore, you are advised that your response will be safeguarded to the extent cited in the Federal Acquisition Regulation (FAR) 42.1503. FAR prohibits the release of past performance evaluations to other than other Government personnel and the company whose performance is being evaluated during the period the information may be used to provide source selection information.

This past performance questionnaire is being submitted by the contractor and you are requested complete it and return it to the Architect of the Capitol in care of John Friedhoff at FAX number (866) 837-6818 on, or before the proposal submission due date. While all elements below may not apply, please complete as much as possible.

## Company/Individual Requesting Past Project Information:

Name:

Past Project Title On Which The Company Is Being Evaluated

**Project Title:** 

#### **Evaluator POC (for verification purposes)**

Name: Agency/Company, POC Date:

Phone No.: Fax No.

E-mail Address:

Address:

Position held or function in relation to project:

Ratings: Please evaluate the contractor's performance using the follo ving ratings:

"O" Outstanding The contractor's performance clearly exceeded the contract requirements.

# AOC PAST PERFORMANCE QUESTIONNAIRE RFP080040

"S" Satisfactory
"M" Marginal

"I"

Unsatisfactory

The contractor's performance met the contract requirements. The

contractor's performance met the minimum contract requirements but with difficulty. The contractor's performance was poor and/or did not satisfy

contract requirements.

Please rate and provide supporting information for the following. If the rating is Outstanding or Unsatisfactory, please provide specific contract/job performance are as which were exceeded or not performed in accordance with the contract's minimum requirements. (Use additional sheets as needed)

1. Performance in meeting delivery/completion schedules: \_\_\_\_\_

#### Rating:

2. What did the contractor do to improve or resolve schedule problems, if any?

## Rating:

3. The contractor's quality control (CQC).

#### Rating:

- 4. The contractor's performance in delivering quality work in accordance with the contract:
- The contractor's ability to provide the required work at a reaso table total price.

#### Rating:

6. The contractor's compliance with labor standards, if applicable.

#### Rating:

7. The contractor's compliance with safety standards.

#### Rating:

8. Has the contractor been given any of the following: Cure notice show cause, letters of reprimand, suspension of payments, termination? If yes, please explain.

# Rating: AOC PAST PERFORMANCE QUESTIONNAIRE RFP0 30040

9. Would you award another contract to this contractor? If 10, please state reasons for not recommending this contractor additional work.

Rating:

	Rating:
11. The relationship between the contractor and owner's contract team	Contracting Officer/COR/COTR?
12. The contractor's on-site management and coordination of subcont	Rating:
	Rating:
13. The contractor's overall corporate management, integrity, reasonate	a pleness and cooperative conduct.
Has the contractor filed any modifications? How makes the contractor been provided an opportunity to discuss as so, what were the results?  OVERALL RATING Rating: Please provide any additional comments:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

10. Was the customer satisfied with the end product?

AOC PAST PERFORMANCE QUESTIC NNAIRE RFP080040

#### \*\*\*\* NOTICE \*\*\*\*

TO: ALL VENDORS/CONTRACTORS/CONSULTANTS

FROM: THE OFFICE OF THE ARCHITECT OF THE CAPITOL

Due to requirements set forth in the DEBT COLLECTION IMPROVEMENT ACT OF 1996 (PUBLIC LAW 104-134), all payments made to vendors, contractors and consultants doing business with the Federal Government must be made by Electronic Funds Transfer (EFT) directly to your financial institution. If you are currently enrolled under EFT with the Architect of the Capitol, no further action is necessary other than to report changes.

EFT payments are cost effective, enabling prompt, convenient and reliable payments directly to a designated bank account.

The Architect of the Capitol, in making EFT payments, supplies the financial institution with identifying information (ie. invoice number), which accompanies each transaction. The financial institution in turn can supply this information to the account holder.

Therefore, to accomplish the mandate of P. L. 104-134, it is necessary that the attached sheet; PAYMENT INFORMATION FORM ACH VENDOR PAYMENT SYSTEM be completed and returned with your bid or offer as set forth in Section G of the solicitation.

# PAYMENT INFORMATION FORM ACH VENDOR PAYMENT SYSTEM

This form is used for ACH payments with an addendum record that carries payment-related information. Recipients of these payments should bring this information to the attention of their financial institution when presenting this form for completion. The information will be transmitted in the CCD+ format to the designated financial institution.

### **Debt Collection Improvement Act of 1996**

#### PAPERWORK REDUCTION ACT STATEMENT

The information being collected on this form is pursuant to Public Law 104-134, which mandated Electronic Funds Transfer for recipients of all federal payments (excluding IRS tax refunds) beginning July 24, 1996. This information will be needed by the Treasury Department to transmit payments and related data.

COMPANY INFORMATION		
NAME:		
ADDRESS:		
CONTRACT NUMBER: AOC	TAXPAYER IDENTIFICATION NUMBER (TIN):	
CONTACT PERSON NAME:	TELEPHONE NUMBER: ( ) FAX NUMBER: ( )	
AGENCY	INFORMATION	
NAME: ARCHITECT OF THE CAPITOL - FORD HOUSE OFF	ICE BUILDING	
ADDRESS: ACCOUNTING DIVISION, ROOM H2-205		
WASHINGTON, D.C. 20024	FAX NUMBER: (202) 225-7321	
CONTACT PERSON NAME: MR. JAMES JARBOE	TELEPHONE NUMBER: (202) 226-2552	
FINANCIAL INSTI	TUTION INFORMATION	
BANK NAME:		
BRANCH LOCATION: (If applicable)		
CONTACT NAME:	TELEPHONE NUMBER: ( )	
NINE DIGIT ROUTING TRANSIT NUMBER:		
DEPOSITOR ACCOUNT NUMBER:		
TYPE OF ACCOUNT: CHECKING SAVINGSLOCKBOX		
SIGNATURE AND TITLE OF REPRESENTATIVE:	TELEPHONE NUMBER:	

Architect of the Capitol Revised 06/11/99

For AOC us	e only:
ID required	
No ID	



# UNITED STATES CAPITOL POLICE WASHINGTON, D.C. 20510-7218

# REQUEST FOR CHECK OF CRIMINAL HISTORY RECORDS

Please report with: (1) a form of valid photo identification and (2) this form; to the Identification Section, Room 103B, U.S. Capitol Police Headquarters, 119 D Street, N.E.

1 Name (Last, First, Middle)	Address:Street & No
	City & State Zip Tele:
2 Other names ever used (e.g. m	aiden name, nickname, etc.)
3 Date of Birth (Month, Day, Year,	Birthplace (City and State or County)
5 Social Security Number	6 Sex
7 Race 8 Height 9	Weight 10 Eye Color 11 Hair Color

# SIGNATURE AND RELEASE OF INFORMATION:

# READ THE FOLLOWING CAREFULLY BEFORE YOU SIGN:

- I understand that the information provided above will be used to check the criminal history records of the Federal Bureau of Investigation (FBI).
- I consent to the use of the information provided above in making a security determination concerning me.
- I certify that, to the best of my knowledge and belief, all the information provided above is true, correct, and complete, and made in good faith.

	true, correct, and compl	ete, and made in good :	faith.	
			*	
12	Signature	13	B Date Signed (Month,	Day, Year)

AUTHORIZED REQUESTER.	
14 Name/Employing Office	
15 Title	
16 Telephone number	17 Date of Request
SIGNATURE AND REQUEST:	
Capitol Police and that these fingerprin	dicated above be fingerprinted by the United States its be submitted for a check of the criminal history igation (FBI). This check will be used in making a applicant/employee.  19 Date Signed (Month, Day, Year)
inentifications ections ==	
20 Individual Receiving Request	
21 Date/Time Received	
22 IS #:	

#### AOC52.215-4

#### Contract Award (Jun 2004)

- (a) The Government will evaluate offers in response to this solicitation without discussions and will award a contract to the responsible offeror whose offer, conforming to the solicitation, will be most advantageous to the Government considering only price and the price-related factors specified elsewhere in the solicitation. Therefore, the offeror s in itial proposal should contain the offeror s best terms from a price standpoint. The Government reserves the right to conduct discussion
- (b) The Government may
- (1) Reject any or all offers;
- (2) Accept other than the lowest offer; and
- (3) Waive informalities or minor irregularities in offers received.
- (c) The Government may accept any item or combination of items, unless doing so is precluced by a restrictive limitation in the solicitation or the offer.
- (d) A written award or acceptance of offer mailed or otherwise furnished to the successful of error within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. I efore the offer's specified expiration time, the Government may accept an offer (or part of an offer as provided in Paragraph (c) of this clause), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. I egotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.

(e) Neither financial data submitted with an offer, nor representations concerning facilities or financing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, i accurate, or not current.

(f) The Government may determine that an offer is unacceptable if the prices proposed are m terially unbalanced between line items or sub line items. Unbalanced pricing exists when, despite an acceptable total evaluated price the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable sk to the Government.

(End of provision)

#### SECTION M

#### EVALUATION FACTORS FOR AWARD

## M.1 PROPOSAL EVALUATION CRITERIA (AOC) (JUN 2003)

.1 The evaluation criteria to be used by the Contracting Officer for the selection of a contractor to perform the work specified are defined below. The criteria are divided into technical and price categories which consist of subsections corresponding to those in the article entitled INSTRUCTIONS FOR PREPARING THE TECHNICAL PROPOSAL and the article entitled INSTRUCTIONS FOR PI EPARING THE PRICE PROPOSAL in Section L. The technical criteria are considered by the Architect to be generally more important

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than price criteria. However, as the difference in technical merit between the p oposals becomes less significant, the relative importance of the price will increase.

.2 TECHNICAL CRITERIA. Each offeror s proposal will be evaluated in accordance with the technical criteria listed below to determine whether it is responsive to the requirements of the R P and are therefore acceptable. Technical criteria are listed below in descending order of importance:

#### .1 Factor 1 Quality Control -

1. The Offeror's Quality Control will be evaluated to determine if the procedures which address Welding Procedure Specifications and Procedure Qualification Records for each repair vill fulfill the requirements and objectives under this solicitation. As well as How their Plan of Accomplishment to will fullfill the requirements under this solicitation.

#### .2 Factor 2 - Corporate Experience (General Contractor/Major Subcontractor). -

- 1. The Offeror s and the proposed subcontractors experience will be evaluated o determine the extent of successful completion of projects, performed within the past three years, with minimum of three successfully completed projects of similar scope, size and complexity to the requirements of this project (Services for preventative maintenance and repairs).
- 2. The experience with the subcontractors and related projects will be evaluate for the extent of successful completion of projects, performed within the past three years, of similar scope, size and complexity to the requirements of this project (Services for preventative maintenance and repairs.

#### .3 Factor 3 - Key Personnel (Project Manager and Field Technicians) -

- 1. The Government will evaluate the qualifications and experience on the resultes of the Offeror's key personnel, including Project Manager and field technicians.
- 2. The purpose of the key personnel information is to evaluate the Offeror s ab ity to provide quality personnel who have the necessary qualifications and experience, in terms of training, bac ground, and recent technical experience, to successfully perform the requirements of this solicitation.

#### .4 Factor 4 - Past Performance (General Contractor/Major Subcontractor ) -

- 1. The Offeror s and the proposed subcontractors past performance will be evaluated to determine the extent of successful completion of projects, performed within the past three years, of sin ilar scope, size and complexity to the requirements of this project (Services for preventive maintenance and regains).
- 2. The AOC will use references provided (Past Performance Questionnaire) in his factor to verify the offeror s and proposed subcontractors past performance relative to conforming to contrate trequirements, meeting prescribed schedules, and history of reasonable and cooperative behavior. Time liness and degree of client satisfaction for each project will be taken into consideration. Proposed subcont actors will be evaluated to determine if their qualifications are sufficient to carry out their portion of the work as described in the specification. The AOC may use other references/information to verify past performance.
- .3 PRICE CRITERIA. The Government will evaluate the price proposals of all "irms found technically qualified. Price criterion measure not only actual dollars but also analyze reaso ableness of the Offeror's proposed price and its position in the range of all prices.

Contract Award - Source Selection Procedures (Jun 2004)

- (a) The Government will award a contract resulting from this solicitation to the responsible of error whose offer conforming to the solicitation will be most advantageous to the Government, cost or price and other factors, spe ified elsewhere in this solicitation, considered.
- (b) The Government may
- (1) Reject any or all offers if such action is in the public interest;
- (2) Accept other than the lowest offer; and
- (3) Waive informalities and minor irregularities in offers received.
- (c) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror s initial proposal should contain the offeror's best terms from a price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Office relater determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in he competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit he number of proposals in the competitive range to the greatest number that will permit an efficient competition among the roost highly rated proposals.

- (d) The Government may accept any item or combination of items, unless doing so is preclude 1 by a restrictive limitation in the solicitation or the offer.
- (e) A written award or acceptance of offer mailed or otherwise furnished to the successful offer or within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. B fore the offer's specified expiration time, the Government may accept an offer (or part of an offer as provided in Paragraph (d) of his provision), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. N gotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.

(f) Neither financial data submitted with an offer, nor representations concerning facilities or f nancing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, in ccurate, or not current.

(g) The Government may determine that an offer is unacceptable if the prices proposed are magrially unbalanced between line items or sub line items. Unbalanced pricing exists when, despite an acceptable total evaluated price, he price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable ri k to the Government.

(End of provision)

#### 52.252-1 Sec. M

#### 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same fc ce and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror i cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or o fer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically in this/these address(es):

www.gsa.gov or www.arnet.gov

(End of provision)

Clauses By Reference

Clause	Title	Date
52.217-5	Evaluation Of Options	11/08/2006

#### Attachment A

#### ELECTRICAL PM SPECIFICATION

#### A SCOPE AND DESCRIPTION OF WORK

The contractor will provide all services and materials as required to perform annual, preventative maintenance for equipment listed on the attached pricing worksheet an in accordance with NETA MTS-2005. The following is an outline of the services required to perform this work. The section numbers referenced in the sections below are from NETA MTS-2005:

# Section 7.1 Switchgear and Switchboard Assemblies

# 1. Visual and Mechanical Inspection

- 1. Inspect physical, electrical, and mechanical condition including evidence of moisture or corona.
- 2. Inspect anchorage, alignment, grounding, and required area clearances.
- 3. Clean the unit.
- Verify that fuse and/or circuit breaker sizes and types correspond to drawings and coordination study as well as to the circuit breaker's address for microprocessorcommunication packages.
- 5. Verify that current and voltage transformer ratios correspond to drawings.
- 6. Inspect bolted electrical connections for high resistance. Perform a thermographic survey of the low voltage switchgear while the equipment is on line, and at least 2 weeks prior to the maintenance and test work.
- 7. Confirm correct operation and sequencing of electrical and mechanical interlock systems.
  - 1. Attempt closure on locked-open devices. Attempt to open locked-closed devices.
  - 2. Make key exchange with all devices included in the interlock scheme as applicable.
- 8. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 9. Verify correct barrier and shutter installation and operation.
- 10. Exercise all active components.
- 11. Inspect mechanical indicating devices for correct operation.

- 12. Verify that filters are in place and/or vents are clear.
- 13. Inspect control power transformers.
  - 1. Inspect for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring, and overall general condition.
  - 2. Verify that primary and secondary fuse ratings or circuit breakers match drawings.
  - Verify correct functioning of drawout disconnecting and grounding contacts and interlocks.
- Perform as-left tests.

#### 2. Electrical Tests

- 1. Perform resistance measurements through bolted electrical connections with a low-resistance ohmmeter in accordance with Section 7.1.1, if applicable.
- 2. Perform insulation—resistance tests for one minute on each bus section, phase-to-phase and phase-to-ground. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NETA MTS 2005, Table 100.1
- 3. Control Power Transformers
  - 1. Perform insulation-resistance tests. Perform measurements from winding-to-winding and each winding-to-ground. Test voltages shall be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NEA MTS 2005, Table 100.1
  - 2. Verify correct function of control transfer relays located in switchgear with multiple power sources.
- 4. Verify operation of switchgear/switchboard heaters and their controller, if applicable.
- 5. Perform lost bus transfer tests if applicable.

#### 3. Test Values

#### 3.2 Test Values – Electrical

- Insulation-resistance values of bus insulation should be in accordance with manufacturer's
  published data. In the absence of manufacturer's published data, use NEA MTS 2005,
  Table 100.1. Values of insulation resistance less than this table or manufacturer's
  recommendations should be investigated.
- 2. Minimum insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.

- 3. Control Power Transformers
  - 1. Insulation-resistance values of control power transformers should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.5. Values of insulation resistance less than this table or manufacturer's recommendations should be investigated.
  - Control transfer relays should perform as designed.
- 4. Heaters should be operational.

# **Section 7.6.1.2**

# Circuit Breakers, Air, Low-Voltage Power

## Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Verify that all maintenance devices are available for servicing and operating the breaker.
- 4. Prior to cleaning the unit, perform as-found tests, if required.
- Clean the unit.
- 6. Inspect arc chutes.
- 7. Inspect moving and stationary contacts for condition, wear, and alignment.
- 8. Verify that primary and secondary contact wipe and other dimensions vital to satisfactory operation of the breaker are correct.
- 9. Perform all mechanical operator and contact alignment tests on both the breaker and its operating mechanism in accordance with manufacturer's published data.
- 10. Inspect bolted electrical connections for high resistance using one of the following methods:
  - 1. Use of a low-resistance ohmmeter in accordance with Section 7.6.1.2.2.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torquewrench method in accordance with manufacturer's published data or Table 100.12.
  - 3. Perform a thermographic survey in accordance with Section 9.
- 11. Verify cell fit and element alignment.

- 12. Verify racking mechanism operation.
- 13. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 14. Perform as-left tests.
- 15. Record as-found and as-left operation counter readings, if applicable.

#### **Electrical Tests**

- 1. Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable, in accordance with Section 7.6.1.2.1.
- Perform insulation-resistance tests for one minute on each pole, phase-to-phase and
  phase-to-ground with the circuit breaker closed, and across each open pole. Apply voltage
  in accordance with manufacturer's published data. In the absence of manufacturer's
  published data, use Table 100.1.
- 3. Perform a contact/pole-resistance test.
- 4. Perform insulation-resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components, follow manufacturer's recommendation.
- 5. Determine long-time pickup and delay by primary current injection.
- 6. Determine short-time pickup and delay by primary current injection.
- 7. Determine ground-fault pickup and delay by primary current injection.
- 8. Determine instantaneous pickup current by primary current injection.
- 9. Test functions of the trip unit by means of secondary injection.
- 10. Perform minimum pickup voltage test on shunt trip and close coils in accordance with Table 100.20.
- 11. Verify operation of charging mechanism.
- 12. Verify correct operation of auxiliary features such as trip and pickup indicators, zone interlocking, electrical close and trip operation, trip-free, antipump function, and trip unit battery condition. Reset all trip logs and indicators.

#### **Test Values**

Test Values - Visual and Mechanical

- 1. Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.6.1.2.1.10.1).
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.6.1.2.1.10.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.6.1.2.1.10.3)

#### Test Values – Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value.
- Insulation-resistance values of breakers should be in accordance with manufacturer's
  published data. In the absence of manufacturer's published data, use Table 100.1. Values of
  insulation resistance less than this table or manufacturer's recommendations should be
  investigated.
- 3. Microhm or millivolt drop values should not exceed the high levels of the normal range as indicated in the manufacturer's published data. If manufacturer's data is not available, investigate values that deviate from adjacent poles or similar breakers by more than 50 percent of the lowest value.
- 4. Insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.
- 5. Long-time pickup values should be as specified, and the trip characteristic shall not exceed manufacturer's published time-current characteristic tolerance band, including adjustment factors. If manufacturer's curves are not available, trip times shall not exceed the value shown in Table 100.7. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- 6. Short-time pickup values should be as specified, and the trip characteristic should not exceed manufacturer's published time-current tolerance band. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- 7. Ground fault pickup values should be as specified, and the trip characteristic should not exceed manufacturer's published time-current tolerance band. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- 8. Instantaneous pickup values should be within the tolerances of manufacturer's published data. In the absence of manufacturer's published data, refer to Table 100.8. (Circuit breakers exceeding specified trip time shall be tagged defective.)
- Pickup values and trip characteristic should be as specified and within manufacturer's published tolerances. (Circuit breakers exceeding specified trip time shall be tagged defective.)

- 10. Minimum pickup voltage on shunt trip and close coils should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, refer to Table 100.20.
- 11. The charging mechanism should operate in accordance with manufacturer's published data.
- 12. Auxiliary features should operate in accordance with manufacturer's published data.

#### **Section 7.6.1.3**

# Circuit Breakers, Air, Medium-Voltage

#### Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Verify that all maintenance devices are available for servicing and operating the breaker.
- 4. Prior to cleaning the unit, perform as-found tests, if required.
- Clean the unit.
- 6. Inspect arc chutes.
- 7. Inspect moving and stationary contacts for condition, wear, and alignment.
- 8. If recommended by manufacturer, slow close/open breaker and check for binding, friction, contact alignment, contact sequence, and penetration.
- 9. Perform all mechanical operation tests on the operating mechanism in accordance with manufacturer's published data.
- 10. Inspect bolted electrical connections for high resistance using one of the following methods:
  - 1. Use of a low-resistance ohmmeter in accordance with Section 7.6.1.3.2.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torquewrench method in accordance with manufacturer's published data or Table 100.12.
  - 3. Perform a thermographic survey in accordance with Section 9.
- 11. Verify cell fit and element alignment.
- 12. Verify racking mechanism operation.
- 13. Inspect puffer operation.

- 14. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 15. Perform time-travel analysis.
- 16. Perform as-left tests.
- 17. Record as-found and as-left operation-counter readings.

### **Electrical Tests**

- 1. Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable. See Section 7.6.1.3.1.
- 2. Perform insulation-resistance tests on each pole, phase-to-phase and phase-to-ground with the circuit breaker closed, and across each open pole for one minute. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.1.
- 3. Perform insulation-resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components or control devices that cannot tolerate the applied voltage, follow manufacturer's recommendation.
- 4. Perform a contact/pole-resistance test.
- 5. With the breaker in a test position, perform the following tests:
  - 1. Trip and close breaker with the control switch.
  - 2. Trip breaker by operating each of its protective relays.
  - 3. Verify mechanism charge, trip-free, and antipump functions.
- 6. Perform minimum pickup voltage tests on trip and close coils in accordance with Table 100.20.
- 7. Perform power-factor or dissipation-factor tests with breaker in both the open and closed positions.
- 8. Perform power-factor or dissipation-factor test on each bushing.
- 9. Perform an overpotential test on each phase with the circuit breaker closed and the poles not under test grounded. Test voltage should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.19.
- 10. Verify blowout coil circuit continuity.

- 11. Verify operation of heaters, if applicable.
- 12. Test instrument transformers in accordance with Section 7.10.

#### **Test Values**

#### Test Values - Visual and Mechanical

- 1. Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.6.1.3.1.10.1)
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.6.1.3.1.10.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.6.1.3.1.10.3)
- 4. Compare travel and velocity values to manufacturer's published data and previous test data. (7.6.1.3.1.15)

#### Test Values – Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value.
- 2. Circuit breaker insulation resistance should be in accordance with Table 100.1.
- Insulation-resistance values of circuit breakers should be in accordance with
  manufacturer's published data. In the absence of manufacturer's published data, use Table
  100.1. Values of insulation resistance less than this table or manufacturer's
  recommendations should be investigated.
- 4. Microhm or millivolt drop values shall not exceed the high levels of the normal range as indicated in the manufacturer's published data. If manufacturer's data is not available, investigate values that deviate from adjacent poles or similar breakers by more than 50 percent of the lowest value.
- 5. Breaker mechanism charge, close, open, trip, trip-free, and antipump features shall function as designed.
- 6. Minimum pickup for trip and close coils shall be in accordance with manufacturer's published data. In the absence of manufacturer's data, refer to Table 100.20.
- 7. Power-factor or dissipation-factor values shall be compared with previous test results of similar breakers or manufacturer's published data.

- 8. Power-factor or dissipation-factor and capacitance values should be within ten percent of nameplate rating for bushings. Hot collar tests are evaluated on a milliampere/milliwatt loss basis, and the results should be compared to values of similar bushings.
- If no evidence of distress or insulation failure is observed by the end of the total time of
  voltage application during the overpotential test, the circuit breaker is considered to have
  passed the test.
- 10. The blowout coil circuit should exhibit continuity.
- 11. Heaters should be operational.
- 12. The results of instrument transformer tests shall be in accordance with Section 7.10.

# Relays 5KV & 15KV Sub Stations

## Visual and Mechanical Inspection

- 1. Inspect relays and cases for physical damage.
- 2. Prior to cleaning the unit, perform as-found tests.
- Clean the unit.
- 4. Tighten case connections. Inspect cover for correct gasket seal. Clean cover glass. Inspect shorting hardware, connection paddles, and/or knife switches. Remove any foreign material from the case. Verify target reset.
- 5. Inspect relay for foreign material, particularly in disk slots of the damping and electromagnets. Verify disk clearance. Verify contact clearance and spring bias. Inspect spiral spring convolutions. Inspect disk and contacts for freedom of movement and correct travel. Verify tightness of mounting hardware and connections. Burnish contacts. Inspect bearings and/or pivots.
- 6. Verify that all settings are in accordance with coordination study or setting sheet supplied by owner, if available.
- Perform as-left tests.

#### **Electrical Tests**

- 1. Perform insulation-resistance test on each circuit-to-frame. Determine from the manufacturer's published data the allowable procedures for this test for solid-state and microprocessor-based relays.
- 2. Inspect targets and indicators.

- 1. Determine pickup and dropout of electromechanical targets.
- 2. Verify operation of all light-emitting diode indicators.
- 3. Set contrast for liquid-crystal display readouts.

# 3. Functional Operation

- 1. 2/62 Timing Relay
  - 1. Determine time delay.
  - 2. Verify operation of instantaneous contacts.
- 2. 21 Distance Relay
  - 1. Determine maximum reach.
  - 2. Determine maximum torque angle.
  - 3. Determine offset.
  - 4. Plot impedance circle.
- 3. 24 Volts/Hertz Relay
  - 1. Determine pickup frequency at rated voltage.
  - 2. Determine pickup frequency at a second voltage level.
  - 3. Determine time delay.
- 4. 25 Sync Check Relay
  - 1. Determine closing zone at rated voltage.
  - 2. Determine maximum voltage differential that permits closing at zero degrees.
  - 3. Determine live line, live bus, dead line, and dead bus set points.
  - 4. Determine time delay.
  - 5. Verify dead bus/live line, dead line/live bus and dead bus/dead line control functions.

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- 1. 27 Undervoltage Relay
  - 1. Determine dropout voltage.
  - 2. Determine time delay.
  - 3. Determine the time delay at a second point on the timing curve for inverse time relays.
- 2. 32 Directional Power Relay
  - 1. Determine minimum pickup at maximum torque angle.
  - 2. Determine closing zone.
  - 3. Determine maximum torque angle.
  - 4. Determine time delay.
  - 5. Verify the time delay at a second point on the timing curve for inverse time relays.
  - 6. Plot the operating characteristic.
  - 1. Determine positive sequence voltage to close the normally open contact.
  - 2. Determine positive sequence voltage to open the normally closed contact (undervoltage trip).
  - 3. Verify negative sequence trip.
  - 4. Determine time delay to close the normally open contact with sudden application of 120 percent of pickup.
  - 5. Determine time delay to close the normally closed contact upon removal of voltage when previously set to rated system voltage.
- 4. 49R Thermal Replica Relay
  - 1. Determine time delay at 300 percent of setting.
  - 2. Determine a second point on the operating curve.
  - 3. Determine pickup.

### 5.50 Instantaneous Overcurrent Relay

- 1. Determine pickup.
- 2. Determine dropout.
- 6. 51 Time Overcurrent
  - 1. Determine minimum pickup.
  - 2. Determine time delays at two points on the time current curve.
- 7. 59 Overvoltage Relay
  - 1. Determine overvoltage pickup.
  - 2. Determine time delay to close the contact with sudden application of 120 percent of pickup.
- 8. 60 Voltage Balance Relay
  - 1. Determine voltage difference to close the contacts with one source at rated voltage.
- 9. 67 Directional Overcurrent Relay
  - 1. Determine directional unit minimum pickup at maximum torque angle.
  - 2. Determine closing zone.
  - 4. Plot operating characteristics.
  - 5. Determine overcurrent unit pickup.
  - 6. Determine overcurrent unit time delay at two points on the time current curve.
- 10. 81 Frequency Relay
  - 1. Verify frequency set points.
  - 2. Determine time delay.
  - 3. Determine undervoltage cutoff.
- 11. 87 Differential
  - 1. Determine operating unit pickup.
  - 2. Determine the operation of each restraint unit.

- 3. Determine slope.
- 4. Determine harmonic restraint.
- 5. Determine instantaneous pickup.

#### 4. Control Verification

- 1. Verify that each of the relay contacts performs its intended function in the control scheme including breaker trip tests, close inhibit tests, 86 lockout tests, and alarm functions.
- 2. For microprocessor-based relays, verify all used inputs, outputs, and internal logic.

#### 5. Test Values

- 1. When not otherwise specified, use manufacturer's recommended tolerances.
- 2. When critical test points are specified, the relay should be calibrated to those points even though other test points may be out of tolerance.

## Section 7.9.1

## Protective Relays, Electromechanical and Solid-State

## Visual and Mechanical Inspection

- 1. Inspect relays and cases for physical damage.
- 2. Prior to cleaning the unit, perform as-found tests, if required.
- Clean the unit.
- Relay Case
  - 1. Tighten case connections.
  - 2. Inspect cover for correct gasket seal.
  - 3. Clean cover glass. Inspect shorting hardware, connection paddles, and/or knife switches.
  - 4. Remove any foreign material from the case.
  - 5. Verify target reset
- 5. Relay

- 1. Inspect relay for foreign material, particularly in disk slots of the damping and electromagnets.
- 2. Verify disk clearance. Verify contact clearance and spring bias.
- Inspect spiral spring convolutions. Inspect disk and contacts for freedom of
  movement and correct travel. Verify tightness of mounting hardware and
  connections. Burnish contacts. Inspect bearings and/or pivots.
- 6. Verify that all settings are in accordance with coordination study or setting sheet supplied by owner.
- 7. Perform as-left tests.

#### **Electrical Tests**

- 1. Perform insulation-resistance test on each circuit-to-frame. Procedures for performing insulation-resistance tests on solid-state relays should be determined from the relay manufacturer's published data.
- 2. Inspect targets and indicators.
  - 1. Determine pickup and dropout of electromechanical targets.
  - 2. Verify operation of all light-emitting diode indicators.
  - 3. Set contrast for liquid-crystal display readouts.

## **Functional Operation**

- 1. 2/62 Timing Relay
  - 1. Determine time delay.
  - 2. Verify operation of instantaneous contacts.
- 2. 21 Distance Relay
  - 1. Determine maximum reach.
  - 2. Determine maximum torque angle.
  - 3. Determine offset.
  - 4. Plot impedance circle.
- 3. 24 Volts/Hertz Relay
  - 1. Determine pickup frequency at rated voltage.

- 2. Determine pickup frequency at a second voltage level.
- 3. Determine time delay.

## 4. 25 Sync Check Relay

- 1. Determine closing zone at rated voltage.
- 2. Determine maximum voltage differential that permits closing at zero degrees.
- 3. Determine live line, live bus, dead line, and dead bus set points.
- 4. Determine time delay.
- 5. Verify dead bus/live line, dead line/live bus and dead bus/dead line control functions.

## 5. 27 Undervoltage Relay

- 1. Determine dropout voltage.
- 2. Determine time delay.
- 3. Determine the time delay at a second point on the timing curve for inverse time relays.

## 6. 32 Directional Power Relay

- 1. Determine minimum pickup at maximum torque angle.
- 2. Determine closing zone.
- 3. Determine maximum torque angle.
- 4. Determine time delay.
- 5. Verify the time delay at a second point on the timing curve for inverse time relays.
- 6. Plot the operating characteristic.

## 7. 40 Loss of Field (Impedance) Relay

- 1. Determine maximum reach.
- 2. Determine maximum torque angle.
- 3. Determine offset.
- 4. Plot impedance circle.

- 8. 46 Current Balance Relay
  - 1. Determine pickup of each unit.
  - 2. Determine percent slope.
  - 3. Determine time delay.
- 9. 46N Negative Sequence Current Relay
  - 1. Determine negative sequence alarm level.
  - 2. Determine negative sequence minimum trip level.
  - 3. Determine maximum time delay.
  - 4. Verify two points on the  $(I_2)^2$ t curve.
- 10. 47 Phase Sequence or Phase Balance Voltage Relay
  - 1. Determine positive sequence voltage to close the normally open contact.
  - 2. Determine positive sequence voltage to open the normally closed contact (undervoltage trip).
  - 3. Verify negative sequence trip.
  - 4. Determine time delay to close the normally open contact with sudden application of 120 percent of pickup.
  - 5. Determine time delay to close the normally closed contact upon removal of voltage when previously set to rated system voltage.
- 11. 49R Thermal Replica Relay
  - 1. Determine time delay at 300 percent of setting.
  - 2. Determine a second point on the operating curve.
  - 3. Determine pickup.
- 12. 49T Temperature (RTD) Relay
  - 1. Determine trip resistance.
  - 2. Determine reset resistance.
- 13. 50 Instantaneous Overcurrent Relay
  - 1. Determine pickup.

- 2. Determine dropout.
- 3. Determine time delay.

#### 14. 51 Time Overcurrent

- 1. Determine minimum pickup.
- 2. Determine time delay at two points on the time current curve.

#### 15. 55 Power Factor Relay

- 1. Determine tripping angle.
- 2. Determine time delay.

## 59 Overvoltage Relay

- 1. Determine overvoltage pickup.
- 2. Determine time delay to close the contact with sudden application of 120 percent of pickup.

## 17. 60 Voltage Balance Relay

- 1. Determine voltage difference to close the contacts with one source at rated voltage.
- 2. Plot the operating curve for the relay.

## 18. 63 Transformer Sudden Pressure Relay

- 1. Determine rate-of-rise or the pickup level of suddenly applied pressure in accordance with manufacturer's published data.
- 2. Verify operation of the 63 FPX seal-in circuit.
- 3. Verify trip circuit to remote operating device.

## 19. 64 Ground Detector Relay

Determine maximum impedance to ground causing relay pickup.

## 20. 67 Directional Overcurrent Relay

- 1. Determine directional unit minimum pickup at maximum torque angle.
- 2. Determine closing zone.
- 3. Determine maximum torque angle.

- 4. Plot operating characteristics.
- 5. Determine overcurrent unit pickup.
- 6. Determine overcurrent unit time delay at two points on the time current curve.

## 21. 79 Reclosing Relay

- 1. Determine time delay for each programmed reclosing interval.
- 2. Verify lockout for unsuccessful reclosing.
- 3. Determine reset time.
- 4. Determine close pulse duration.
- 5. Verify instantaneous overcurrent lockout.

## 22. 81 Frequency Relay

- 1. Verify frequency set points.
- 2. Determine time delay.
- 3. Determine undervoltage cutoff.

#### 23. 85 Pilot Wire Monitor

- 1. Determine overcurrent pickup.
- 2. Determine undercurrent pickup.
- 3. Determine pilot wire ground pickup level.

#### 24. 87 Differential

- 1. Determine operating unit pickup.
- 2. Determine the operation of each restraint unit.
- 3. Determine slope.
- 4. Determine harmonic restraint.
- 5. Determine instantaneous pickup.
- 6. Plot operating characteristics for each restraint.

#### **Control Verification**

Verify that each of the relay contacts performs its intended function in the control scheme including breaker trip tests, close inhibit tests, 86 lockout tests, and alarm functions.

#### **Test Values**

- 1. When not otherwise specified, use manufacturer's recommended tolerances.
- 2. When critical test points are specified, the relay should be call brated to those specified points even though other test points may be out of tolerance.

## Section 7.9.2

## Protective Relays, Microprocessor-Based

## Visual and Mechanical Inspection

- Record model number, style number, serial number, firmware revision, software revision, and rated control voltage.
- Download all events from the event recorder in filtered and unfiltered mode before
  performing any tests on the relay. Download the sequence-of-events recorder prior to
  testing the relay.
- 3. Verify operation of light-emitting diodes, display, and targets.
- Record passwords for all access levels.
- 5. Clean the front panel and remove foreign material from the case.
- 6. Check tightness of connections.
- 7. Verify that the frame is grounded in accordance with manufacturer's instructions.
- 8. Download settings from the relay. Print a copy of the settings for the report and compare the settings to those specified in the coordination study.

#### **Electrical Tests**

- 1. Perform insulation-resistance tests from each circuit to the grounded frame in accordance with manufacturer's published data.
- 2. Apply voltage or current to all analog inputs and verify correct registration of the relay meter functions.
- 3. Functional Operation
  - Check functional operation of each element used in the protection scheme as described for electromechanical relays.
- 4. Control Verification

- 1. Check operation of all active digital inputs.
- 2. Check all output contacts or SCRs, preferably by operating the controlled device such as circuit breaker, auxiliary relay, or alarm.
- 3. Check all internal logic functions used in the protection scheme.
- 4. Upon completion of testing reset all min/max recorders, fault counters, sequence of events recorder, and all event records.

## Section 7.2

## Transformers, Liquid-Filled

## Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Verify the presence of PCB labeling, if applicable.
- 4. Prior to cleaning the unit, perform as-found tests, if required.
- 5. Clean bushings and control cabinets.
- 6. Verify operation of alarm, control, and trip circuits from temperature and level indicators, pressure relief device, and fault pressure relay, if applicable.
- 7. Verify that cooling fans and/or pumps operate correctly.
- 8. Inspect bolted electrical connections for high resistance using one of the following methods:
  - Use of a low-resistance ohmmeter.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torquewrench method in accordance with manufacturer's published data or NETA MTS 2005, Table 100.12.
  - 3. Perform a thermographic survey.
- 9. Verify correct liquid level in tanks and bushings.
- 10. Verify that positive pressure is maintained on gas-blanketed transformers.
- 11. Perform inspections and mechanical tests as recommended by the manufacturer.

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- 14. Perform as-left tests.
- 15. Verify de-energized tap-changer position is left as specified.

### **Electrical Tests**

- 1. Perform insulation-resistance tests, winding-to-winding and each winding-to-ground. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NEA MTS 2005, Table 100.5. Calculate polarization index.
- 2. Perform turns-ratio tests at the designated tap position.
- 3. Perform insulation power-factor or dissipation-factor tests on all windings in accordance with test equipment manufacturer's published data.
- 4. Perform excitation-current tests in accordance with the test equipment manufacturer's published data.
- 5. Measure the resistance of each winding at the designated tap position.
- 6. If the core ground strap is accessible, remove and measure the core insulation resistance at 500 volts dc.
- 7. Remove a sample of insulating liquid in accordance with ASTM D 923. The sample shall be tested for the following.
  - 1. Dielectric breakdown voltage: ASTM D 877 and/or ASTM D 1816
  - 2. Acid neutralization number: ANSI/ASTM D 974
  - 3. Specific gravity: ANSI/ASTM D 1298
  - 4. Interfacial tension: ANSI/ASTM D 971 or ANSI/ASTM D 2285
  - 5. Color: ANSI/ASTM D 1500
  - 6. Visual Condition: ASTM D 1524
  - 7. Water in insulating liquids: ASTM D 1533. (Required on 25 kV or higher voltages and on all silicone-filled units.)
  - 8. Measure power factor or dissipation factor in accordance with ASTM D 924.
- 8. Remove a sample of insulating liquid in accordance with ASTM D 3613 and perform dissolved-gas analysis (DGA) in accordance with ANSI/IEEE C57.104 or ASTM D3612.
- 9. Test the transformer neutral grounding impedance devices, if applicable.

#### 3.1 Test Values - Visual and Mechanical

- 1. Alarm, control, and trip circuits from temperature and level indicators as well as pressure relief device and fault pressure relay should operate within manufacturer's recommendations for their specified settings. (7.2.2.1.6)
- 2. Cooling fans and/or pumps should operate. (7.2.2.1.7)
- Compare bolted connection resistance values to values of sim lar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value. (7.2.2.1.8.1)
- 4. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.2.2.1.8.2)
- 5. Results of the thermographic survey shall be in accordance with Section 9. (7.2.2.1.8.3)
- 6. Liquid levels in the transformer tanks and bushings should be within indicated tolerances. (7.2.2.1.9)
- 7. Positive pressure (2 psig) should be indicated on pressure gauge for gas-blanketed transformers. (7.2.2.1.10)

#### 3.2 Test Values – Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate
  values which deviate from those of similar bolted connections by more than 50 percent of
  the lowest value.
- 2. Minimum insulation-resistance values of transformer insulation should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.5. Values of insulation resistance less than this table or manufacturer's recommendations should be investigated. The polarization index shall be compared to previously obtained results and should not be less than 1.0.
- 3. Turns-ratio test results should not deviate by more than one-half percent from either the adjacent coils or the calculated ratio.
- 4. Maximum power-factor/dissipation-factor values of liquid-filled transformers corrected to 20°C should be in accordance with the transformer manufacturer's published data. Representative values are indicated in Table 100.3.
- 6. Typical excitation-current test data pattern for a three-legged core transformer is two similar current readings and one lower current reading.
- Temperature corrected winding-resistance values should compare within one percent of previously obtained results.

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- 8. Core insulation values should be comparable to previously obtained results but not less than one megohm at 500 volts dc.
- 10. Insulating liquid values should be in accordance with Table 100.4.
- 11. Evaluate results of dissolved-gas analysis in accordance with ANSI/IEEE Standard C57.104.
- 14. Compare grounding impedance device values to previously obtained results. In the absence of previously obtained values, compare obtained values to manufacturer's published data.

## Section 9

## Thermographic Survey

As a minimum, equipment to be inspected shall include all current-carrying devices.

## Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Remove all necessary covers prior to thermographic inspection. Use appropriate caution, safety devices, and personal protective equipment.

## Thermographic Survey Report

Provide a report which includes the following:

- 1. Description of equipment to be tested.
- 2. Discrepancies.
- 3. Temperature difference between the area of concern and the reference area.
- 4. Probable cause of temperature difference.
- 5. Areas inspected. Identify inaccessible and/or unobservable areas and/or equipment.
- Identify load conditions at time of inspection.
- 7. Provide photographs and/or thermograms of the deficient area.
- 8. Provide recommended action for repair.

#### **Test Parameters**

1. Inspect distribution systems with imaging equipment capable of detecting a minimum temperature difference of 1°C at 30°C.

- 2. Equipment shall detect emitted radiation and convert detected radiation to visual signal.
- 3. Thermographic surveys should be performed during periods of maximum possible loading. Refer to ANSI/NFPA 70B, Section 20.17.

#### **Test Results**

ggested actions based on temperature rise can be found in Table 100 of NETA MTS -2005

## Section 7.1

## Switchgear and Switchboard Assemblies

## Visual and Mechanical Inspection

- 1. Inspect physical, electrical, and mechanical condition including evidence of moisture or corona.
- 2. Inspect anchorage, alignment, grounding, and required area clearances.

3.

- 4. Clean the unit.
- Verify that fuse and/or circuit breaker sizes and types correspond to drawings and coordination study as well as to the circuit breaker's address for microprocessorcommunication packages.
- 6. Verify that current and voltage transformer ratios correspond to drawings.
- 7. Inspect bolted electrical connections for high resistance. Perform a thermographic survey of the low voltage switchgear while the equipment is on line, and at least 2 weeks prior to the maintenance and test work.
- 8. Confirm correct operation and sequencing of electrical and mechanical interlock systems.
  - 1. Attempt closure on locked-open devices. Attempt to open locked-closed devices.
  - 2. Make key exchange with all devices included in the interlock scheme as applicable.
- 9. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 10. Verify correct barrier and shutter installation and operation.
- 11. Exercise all active components.
- 12. Inspect mechanical indicating devices for correct operation.

- 13. Verify that filters are in place and/or vents are clear.
- 14. Inspect control power transformers.
  - 1. Inspect for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring, and overall general condition.
  - 2. Verify that primary and secondary fuse ratings or circuit breakers match drawings.
  - Verify correct functioning of drawout disconnecting and grounding contacts and interlocks.
- Perform as-left tests.

#### **Electrical Tests**

- 1. Perform resistance measurements through bolted electrical connections with a low-resistance ohmmeter in accordance with Section 7.1.1, if applicable.
- 2. Perform insulation—resistance tests for one minute on each bus section, phase-to-phase and phase-to-ground. Apply voltage in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NETA MTS 2005, Table 100.1
- 3. Control Power Transformers
  - 1. Perform insulation-resistance tests. Perform measurements from winding—to-winding and each winding-to-ground. Test voltages shall be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use NETA MTS 2005, Table 100.1
  - Verify correct function of control transfer relays located in switchgear with multiple power sources.
- 4. Verify operation of switchgear/switchboard heaters and their controller, if applicable.
- 5. Perform lost bus transfer tests if applicable.

#### **Test Values**

#### 3.2 Test Values – Electrical

Insulation-resistance values of bus insulation should be in accordance with manufacturer's
published data. In the absence of manufacturer's published data, use NEA MTS 2005,
Table 100.1. Values of insulation resistance less than this table or manufacturer's
recommendations should be investigated.

- 2. Minimum insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.
- 3. Control Power Transformers
  - Insulation-resistance values of control power transformers should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.5. Values of insulation resistance less than this table or manufacturer's recommendations should be investigated.
  - 2. Control transfer relays should perform as designed.
- 4. Heaters should be operational.

## Section 7.17

## Adjustable-Speed Drive Systems

## 1. Visual and Mechanical Inspection

- Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, and grounding.
- 3. Prior to cleaning the unit, perform as-found tests.
- 4. Clean the unit.
- 5. Ensure vent path openings are free from debris and that heat transfer surfaces are not contaminated by oil, dust, or dirt.
- Verify correct connections of circuit boards, wiring, disconnects, and ribbon cables.
- 7. Motor running protection
  - 1. Compare drive overcurrent set points with motor full-load current rating to verify correct settings.
  - 2. If drive is used to operate multiple motors, compare individual overload element ratings with motor full-load current ratings.
  - 3. Apply minimum and maximum speed set points. Confirm set points are within limitations of the load coupled to the motor.

- 8. Inspect bolted electrical connections for high resistance using one of the following methods:
  - 1. Use of a low-resistance ohmmeter.
  - 2. Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method in accordance with manufacturer's published data or Table 100.12.
  - 3. Perform a thermographic survey.
- 9. Verify correct fuse sizing in accordance with manufacturer's published data.
- 10. Perform as-left tests.

#### 2. Electrical Tests

- 1. Perform resistance measurements through bolted connections with low-resistance ohmmeter, if applicable.
- 2. Test the motor overload relay elements by injecting primary current through the overload circuit and monitoring trip time of the overload element.
- 3. Test input circuit breaker by primary injection.
- 4. Perform insulation resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components, follow manufacturer's recommendation.
- 5. Test for the following parameters in accordance with relay calibration procedures outlined in Section 7.9 or as recommended by the manufacturer:
  - 1. Input phase loss protection
  - 2. Input overvoltage protection
  - 3. Output phase rotation
  - 4. Overtemperature protection
  - 5. DC overvoltage protection
  - 6. Overfrequency protection
  - 7. Drive overload protection
  - 8. Fault alarm outputs

- 6. Perform continuity tests on bonding conductors in accordance with Section 7.13.
- Perform operational tests by initiating control devices.
  - 1. Slowly vary drive speed between minimum and maximum. Observe motor and load for unusual noise or vibration.
  - 2. Verify operation of drive from remote start/stop and speed control signals.

#### 3. Test Values

## 3.1 Test Values – Visual and Mechanical

- Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.17.1.8.1)
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.17.1.8.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.17.1.8.3)

#### 3.2 Test Values – Electrical

- Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value.
- 2. Overload test trip times at 300 percent of overload element rating should be in accordance with manufacturer's published time-current curve.
- 3. Input circuit breaker test results shall be in accordance with Section 7.6.
- 4. Insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two megohms.
- 5. Relay calibration test results shall be in accordance with Section 7.9.
- 6. Continuity of bonding conductors shall be in accordance with Section 7.13.
- 7. Control devices should perform in accordance with system requirements.

## **Section 7.22.3**

## **Emergency Systems, Automatic Transfer Switches**

## 1. Visual and Mechanical Inspection

- 1. Inspect physical and mechanical condition.
- 2. Inspect anchorage, alignment, grounding, and required clearances.
- 3. Prior to cleaning the unit, perform as-found tests.
- 4. Clean the unit.
- 5. Use appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 6. Verify that manual transfer warnings are attached and visible.
- 7. Verify tightness of all control connections.
- 8. Inspect bolted electrical connections for high resistance using one of the following methods:
  - 1. Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method in accordance with manufacturer's published data or Table 100.12.
  - 2. Perform a thermographic survey in accordance with Section 9.
- 9. Perform manual transfer operation.
- 10. Verify positive mechanical interlocking between normal and alternate sources.
- Perform as-left tests.

## 2. Electrical Tests

- 1. Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable, in accordance with Section 7.22.3.1.
- 2. Perform insulation resistance tests on all control wiring with respect to ground. The applied potential shall be 500 volts dc for 300-volt rated cable and 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components or for control devices that cannot tolerate the applied voltage, follow manufacturer's recommendation.
- 3. Perform a contact/pole-resistance test.
- 4. Verify settings and operation of control devices.
- 5. Calibrate and set all relays and timers in accordance with Section 7.9.

#### 6. Perform automatic transfer tests:

- 1. Simulate loss of normal power.
- 2. Return to normal power.
- 3. Simulate loss of emergency power.
- 4. Simulate all forms of single-phase conditions.

## 7. Verify correct operation and timing of the following functions:

- 1. Normal source voltage-sensing relays.
- 2. Engine start sequence.
- 3. Time delay upon transfer.
- Alternate source voltage-sensing relays.
- 5. Automatic transfer operation.
- Interlocks and limit switch function.
- 7. Time delay and retransfer upon normal power restoration.
- 8. Engine cool down and shutdown feature.

#### 3. Test Values

#### 3.1 Test Values – Visual and Mechanical

- 1. Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value. (7.22.3.1.8.1)
- 2. Bolt-torque levels should be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.12. (7.22.3.1.8.2)
- 3. Results of the thermographic survey shall be in accordance with Section 9. (7.22.3.1.8.3)

#### 3.2 Test Values – Electrical

 Compare bolted connection resistance values to values of similar connections. Investigate values which deviate from those of similar bolted connections by more than 50 percent of the lowest value.

- 2. Insulation-resistance values of control wiring should be comparable to previously obtained results but not less than two meghoms.
- 3. Microhm or millivolt drop values should not exceed the high levels of the normal range as indicated in the manufacturer's published data. If manufacturer's data is not available, investigate values that deviate from adjacent poles or similar switches by more than 50 percent of the lowest value.
- 4. Control devices should operate in accordance with manufacturer's published data.
- 5. Relay test results shall be in accordance with Section 7.9.
- 6. Automatic transfers should operate in accordance with manufacturer's design.
- 7. Operation and timing should be in accordance with manufacturer's and/or system design requirements.

# ATTACHMENT B SUPPLIES OR SERVICES AND PRICES/COSTS All pricing is to be Normal working hours unless otherwise stated

# Old East Sub-Station & Load Center #1

					1127
001.	Perform Allis Chalmers & Westinghouse 208 V Breaker Annual Maintenance: Load Center # 1 208 V breakers in service, to be secondary tested, meggered, ductored, cleaned and lubricated per NETA MTS guidelines. Outages will be required.	\$ \$	X X	(LA25) 11 (LA75) 1	\$ \$
	Perform Allis Chalmers 5 KV Circuit Breaker Annual Inspection (Load Center #1): Medium voltage air breakers, to be removed, hi pot and megaword, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours.	\$ \$	x x	(1200A) 1 Primary Incoming (1200A) 7 Secondary Outgoing	\$ \$
002.	208V main above A/C 100HP Starters service, to be secondary tested, meggered, ductored, cleaned and lubricated per NETA MTS weekday work as outages will be required.	\$	X	(Starters) 7	\$
003.	Perform Allis Chalmers 15 kV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours.	\$	X	4	\$

004.	Perform Allis Chalmers 5 KV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and megaword, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours.	\$ x	22	\$
005.	Perform Old East Sub-Station DC System Annual Inspection and Maintenance of relays on the Allis Chalmers 15KV breakers in the East Sub. Sta. weekday work as an outage is not anticipated	\$ X	1	\$
006.	Perform Allis Chalmers 15K to 4160v (PCB's) Transformers Annual Electrical Inspection & Testing: Transformers to be megaword, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours	\$ x	4	\$
007.	Perform Allis Chalmers (PCB's) 5k to 208v Transformers Annual Electrical Inspection & Testing: L/C # 1 Transformers to be megaword, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$ x	1	\$
008.	Test and Calibrations for settings on 5 KV & 15 KV relays and doc. all test results (See chart for relay list).	\$ x	95	\$

# Old West Refrigeration Plant Sub-Station S/W Gear

	Services	<u>Unit Price</u>	8	Estimated Quantity*	Total Price
009.	Perform Allis Chalmers 480 VAC Breaker Triennial Maintenance:  480 V breakers in service, to be secondary tested, meggered, ductored, cleaned and lubricated per NETA MTS guidelines, overtime work as outages will be	\$	X	16	\$
010.	Perform Allis Chalmers 480 VAC Breaker Triennial Maintenance:  480V main and tie breakers and spares, scope as above except weekday work as outages will not be needed.	\$	x	7	\$

011.	Perform I-T-E 15 kV Circuit Breaker Annual Inspection:  Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	16	= \$
	Perform I-T-E 5 kV Circuit Breaker Annual Inspection:			
012.	Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	35	= \$
013.	Blank			
		\$ х		= \$
014.	Perform15K to 4160v Transformers Annual Electrical Inspection & Testing:  Transformers to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours Perform 15k to 480v Transformers Annual Electrical Inspection & Testing:	\$ x	2	= \$

015.	Transformers to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination,	G 64	117	I	
	dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$	Х	2	= \$
016.	Perform Test and Calibrations for settings on 5 KV & 15 KV relays and doc. all test results (See chart for relay list).	\$	X	189	= \$

# New West Refrigeration Plant Expansion Sub-Station

N.			1 3		
017.	Perform Cutler Hammer 480 VAC Breaker Triennial Maintenance: 480 V breakers in service, to be secondary tested, meggered, ductored, cleaned and lubricated per NETA MTS guidelines, Reg. hours work as outages will be requireded.	\$	X	(3) DS II 840 800 amps Frame breaker	= \$
018.	480V main and tie breakers and spares, scope as above except weekday work as outages will not be needed.	\$	X	(3) DS II 840 4000 amps Frame breaker	= \$
019.	Perform Cutler Hammer 15 kV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ \$	X	2000R amps (17)150	= \$ = \$
020.	Perform Cutler Hammer 5 kV Circuit Breaker Annual Inspection: Medium voltage air breakers, to be removed, hi pot and meggered, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as required during normal working hours	\$ \$	X	1200amps (3) 50- vcp-50c	= \$ = \$
021.	Perform West Refrigeration Plant DC System Annual Inspection and Maintenance of relays on the 5 and Cutler Hammer 15KV breakers in the west plant, including the new solid state units on the Cutler Hammer 5KV gear, weekday work as an outage is not anticipated	\$	х	106	= \$

022.	Perform15K to 4160v Transformers Annual Electrical Inspection & Testing: Transformers Cutler Hammer to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as required during normal working hours	\$ х	4	= \$
023.	Perform 15k to 480v Transformers Annual Electrical Inspection & Testing: Transformers Cutler Hammer to be meggered, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$ х	2	=\$
024.	Perform Test and Calibrations for settings on 5 KV & 15 KV relays and doc. all test results (See chart for relay list).	\$ Х	89	=\$
025.	Perform Test and Calibrations for settings on 480v Culter Hammer 9000 VFD's	\$ x	3	=\$
026.	Perform Test and Calibrations for settings on 480v Culter Hammer Motor Control Center	\$ x	1	=\$
027	Perform Test and Calibrations for settings on 4160v Culter Hammer Motor Control Center Pumps	\$ X	4	=\$

# New East Sub-Station and Emergency Systems, Swicth-Gear for Automatic Generator Transfer.(Load Center 2 & 3)

028.	Perform Annual ASCO 7000 Series Transfer SW 480 VAC Maintenance: Emergency Systems, 800 Amp Automatic Transfer Switch,	\$ х	(1) 800amp Transfer Sw	\$
029.	480V breakers in 800 Amp Service, tighted, tested & cleaned and per NEA MTS guidelines, work will be done Reg. hours outages will be needed.	\$ Х	(1) 800amp Panel Board	\$
030.	Perform Maintenance: Emergency Systems, Switch gear for Automatic Generator power, to Transfer Switch's 2000amp C/H	\$ Х	(2) 2000 amp Trans./SW	\$
031.	Cutler Hammer 480V Circuit Breakers Annual Inspection: DSII -608 800amp voltage air breakers, to be removed, tested by means of portable hipot or megohmmeter, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	(4) 800 amp DSII Breakers	\$

032.	Perform Cutler Hammer 208VCircuit Breaker Annual Inspection: DSII -620 2000amp 208 voltage air breakers, to removed, hi pot and megaword, ductored, and operated with our DC source, at min and max control voltages, then trip tested through a relay to verify control circuits and secondary contacts, with outages as needed during normal working hours	\$ X	(6) 2000amp Breakers	\$
033.	Perform West Plant DC System Annual Inspection; Maintenance of relays on the Cutler HammerDSII - 620 800amp 208V breakers n the New East plant, including the new solid state units on the Cutler Hammer 208V gear, weekday work as an outage is not anticipated	\$ X	(35) 800amp Breakers	\$
034.	Perform 480v to 208/120v KVA 500 Transformers Annual Electrical Inspection & Testing: Maintenance: Emergency Systems, Swicth Gear for Automatic Generator power, to Transfer Switchs Transformers Cutler Hammer to be megaword, turns ratio tested, Dry Type, with outages as needed during normal working hours	\$ X	2	\$

035.	Perform 4160v to 208/120V KVA500/750 Transformers Annual Electrical Inspection & Testing: Transformers Cutler Hammer to be megaword, turns ratio tested, and a fluid sample drawn for analysis for contamination, dielectric, and combustible gasses, with outages as needed during normal working hours. Work is to include nitrogen top off and installation of a fill port on one transformer.	\$ X	4	\$
036.	Perform Test and Calibrations for settings on 208v gear relays and doc. all test results.  A. (1) C/H I Q analizer Gen SW. Gear.  B. (2) C/H Breaker Monitor M/P 3000  C. (4) C/H (IQDP) 4000  Main Load Metering	\$ X	7	\$

# General Overhead, Contract Maintenance and Option Years

037.	General Overhead and Profit to fulfill contract.	\$
038.	Total Contract Value for Base Year	\$

Please also fill in Section B, Page 2 & 3 of this solicitation.

WD 05-2103 (Rev.-4) was first posted on www.wdol.gov on 07/10/2007

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REGISTER OF WAGE DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARIMENT OF LABOR

EMPLOYMENT STANDARDS ADMINISTRATION

WAGE AND HOUR DIVISION

WASHINGTON D.C. 20210

Wage Determination No.: 2005-2103

Revision No.: 4

Date Of Revision: 07/05/2007

William W.Gross Director Division of Wage Determinations

States: District of Columbia, Maryland, Virginia

Area: District of Columbia Statewide

Maryland Counties of Calvert, Charles, Frederick, Montgomery, Prince George's, St

Mary's

Virginia Counties of Alexandria, Arlington, Fairfax, Falls Church, Fauquier, King

George, Loudoun, Prince William, Stafford

#### \*\*Fringe Benefits Required Follow the Occupational Listing\*\*

OCCUPATION CODE - TITLE	MINIMUM WAGE	RATE
01000 - Administrative Support And Clerical Occupations		
01011 - Accounting Clerk I		13.79
01012 - Accounting Clerk II		15.49
01013 - Accounting Clerk III		18.43
01020 - Administrative Assistant		23.59
01040 - Court Reporter		18.43
01051 - Data Entry Operator I		12.67
01052 - Data Entry Operator II		13.82
01060 - Dispatcher, Motor Vehicle		16.50
01070 - Document Preparation Clerk		13.29
01090 - Duplicating Machine Operator		13.29
01111 - General Clerk I		13.72
01112 - General Clerk II		15.32
01113 - General Clerk III		18.74
01120 - Housing Referral Assistant		21.66
01141 - Messenger Courier		10.23
01191 - Order Clerk I		14.74
01192 - Order Clerk II		16.29
01261 - Personnel Assistant (Employment) I		15.60
01262 - Personnel Assistant (Employment) II		18.43
01263 - Personnel Assistant (Employment) III		21.66
01270 - Production Control Clerk		21.29
01280 - Receptionist		12.72
01290 - Rental Clerk		15.60
01300 - Scheduler, Maintenance		15.60
01311 - Secretary I		17.03
01312 - Secretary II		18.39
01313 - Secretary III		21.66
01320 - Service Order Dispatcher		15.82
01410 - Supply Technician		23.59
01420 - Survey Worker		18.43
01531 - Travel Clerk I		12.07
01532 - Travel Clerk II		13.01

	Page 2 of 9
01533 - Travel Clerk III	13.99
01611 - Word Processor I	13.76
01612 - Word Processor II	15.60
01613 - Word Processor III	18.43
05000 - Automotive Service Occupations	
05005 - Automobile Body Repairer, Fiberglass	25.26
05010 - Automotive Electrician	21.37
05040 - Automotive Glass Installer	20.14
05070 - Automotive Worker	20.14
05110 - Mobile Equipment Servicer	17.31
05130 - Motor Equipment Metal Mechanic	22.53
05160 - Motor Equipment Metal Worker	20.14
05190 - Motor Vehicle Mechanic	22.53
05220 - Motor Vehicle Mechanic Helper	16.81
05250 - Motor Vehicle Upholstery Worker	19.66
05280 - Motor Vehicle Wrecker	20.14
05310 - Painter, Automotive	21.37
05340 - Radiator Repair Specialist	20.14
05370 - Tire Repairer	14.43
05400 - Transmission Repair Specialist	22.53
07000 - Food Preparation And Service Occupations	12
07010 - Baker	13.18
07041 - Cook I	11.97
07042 - Cook II	13.28
07070 - Dishwasher	9.76
07130 - Food Service Worker 07210 - Meat Cutter	10.25
07210 - Meat Cutter 07260 - Waiter/Waitress	16.07 8.59
09000 - Furniture Maintenance And Repair Occupations	0.59
09010 - Electrostatic Spray Painter	18.05
09040 - Furniture Handler	12.78
09080 - Furniture Refinisher	18.39
09090 - Furniture Refinisher Helper	14.11
09110 - Furniture Repairer, Minor	16.31
09130 - Upholsterer	18.05
11000 - General Services And Support Occupations	
11030 - Cleaner, Vehicles	9.67
11060 - Elevator Operator	9.79
11090 - Gardener	15.70
11122 - Housekeeping Aide	10.89
11150 - Janitor	10.89
11210 - Laborer, Grounds Maintenance	12.07
11240 - Maid or Houseman	10.84
11260 - Pruner	11.37
11270 - Tractor Operator	14.19
11330 - Trail Maintenance Worker	12.07
11360 - Window Cleaner	11.31
12000 - Health Occupations	16.06
12010 - Ambulance Driver	16.06
12011 - Breath Alcohol Technician	17.67
12012 - Certified Occupational Therapist Assistant	20.31
12015 - Certified Physical Therapist Assistant 12020 - Dental Assistant	19.99
12020 - Dental Assistant 12025 - Dental Hygienist	16.90
12030 - EKG Technician	24.34
12030 - Ekg Technician 12035 - Electroneurodiagnostic Technologist	24.34
12040 - Emergency Medical Technician	17.67
12071 - Licensed Practical Nurse I	18.60
12072 - Licensed Practical Nurse II	20.82
12073 - Licensed Practical Nurse III	21.79

		Page 3 of 9
12100	- Medical Assistant	14.23
	- Medical Laboratory Technician	18.04
	- Medical Record Clerk	14.96
	- Medical Record Technician	16.67
	- Medical Transcriptionist	16.46
	- Nuclear Medicine Technologist	28.93
	- Nursing Assistant I	9.75
	- Nursing Assistant II	10.96
	- Nursing Assistant III	12.99
	- Nursing Assistant IV	14.58
	- Optical Dispenser	16.67
	- Optical Technician	14.41
	- Pharmacy Technician	15.75
12280	- Phlebotomist	14.58
12305	- Radiologic Technologist	27.61
12311	- Registered Nurse I	24.92
12312	- Registered Nurse II	31.22
12313	- Registered Nurse II, Specialist	31.22
12314	- Registered Nurse III	37.77
12315	- Registered Nurse III, Anesthetist	37.77
12316	- Registered Nurse IV	45.28
	- Scheduler (Drug and Alcohol Testing)	18.04
	Information And Arts Occupations	
	- Exhibits Specialist I	18.55
	- Exhibits Specialist II	23.33
	- Exhibits Specialist III	28.11
	- Illustrator I	18.73
	- Illustrator II	23.42
	- Illustrator III	28.82
	- Librarian	25.45
	- Library Aide/Clerk	12.52
	- Library Information Technology Systems Administrator	22.99
	- Library Technician - Media Specialist I	17.88 16.58
	- Media Specialist II	18.55
	- Media Specialist III	20.68
	- Photographer I	14.67
	- Photographer II	17.18
	- Photographer III	21.52
	- Photographer IV	26.05
	- Photographer V	29.15
	- Video Teleconference Technician	16.58
14000 -	Information Technology Occupations	
	- Computer Operator I	16.72
	- Computer Operator II	18.71
	- Computer Operator III	20.86
	- Computer Operator IV	23.18
	- Computer Operator V	25.66
	- Computer Programmer I (1)	21.60
	- Computer Programmer II (1)	26.37
	- Computer Programmer III (1)	27.62
	- Computer Programmer IV (1)	27.62
	- Computer Systems Analyst I (1)	27.62
	- Computer Systems Analyst II (1)	27.62
	- Computer Systems Analyst III (1) - Peripheral Equipment Operator	27.62 16.72
	- Personal Computer Support Technician	23.18
	Instructional Occupations	23.10
	- Aircrew Training Devices Instructor (Non-Rated)	34.39
	- Aircrew Training Devices Instructor (Non-Rated)	42.72
	1	

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15030	- Air Crew Training Devices Instructor (Pilot)	50.66
	- Computer Based Training Specialist / Instructor	31.26
	- Educational Technologist	29.09
15070	- Flight Instructor (Pilot)	50.66
	- Graphic Artist	24.95
15090	- Technical Instructor	23.87
	- Technical Instructor/Course Developer	29.19
	- Test Proctor	19.04
	- Tutor	19.04
	Laundry, Dry-Cleaning, Pressing And Related Occupa	
	- Assembler	8.95
	- Counter Attendant	8.95
	- Dry Cleaner	12.21
	- Finisher, Flatwork, Machine	8.95
	- Presser, Hand	8.95
	- Presser, Machine, Drycleaning	8.95
	- Presser, Machine, Shirts	8.95
	- Presser, Machine, Wearing Apparel, Laundry	8.95
	- Sewing Machine Operator - Tailor	12.30
	- Washer, Machine	13.01
	Machine Tool Operation And Repair Occupations	9.81
	- Machine-Tool Operator (Tool Room)	10.05
	- Tool And Die Maker	18.95
	Materials Handling And Packing Occupations	23.05
	- Forklift Operator	17.26
	- Material Coordinator	21.29
	- Material Expediter	21.29
	- Material Handling Laborer	12.65
	- Order Filler	13.21
	- Production Line Worker (Food Processing)	17.28
	- Shipping Packer	14.46
	- Shipping/Receiving Clerk	14.46
	- Store Worker I	10.44
21150	- Stock Clerk	14.35
	- Tools And Parts Attendant	17.26
21410	- Warehouse Specialist	17.26
	Mechanics And Maintenance And Repair Occupations	
	- Aerospace Structural Welder	25.68
23021	- Aircraft Mechanic I	24.46
23022	- Aircraft Mechanic II	25.68
23023	- Aircraft Mechanic III	26.97
	- Aircraft Mechanic Helper	16.61
	- Aircraft, Painter	23.42
	- Aircraft Servicer	18.71
	- Aircraft Worker	19.90
	- Appliance Mechanic	20.60
	- Bicycle Repairer	14.43
	- Cable Splicer	24.98
	- Carpenter, Maintenance	20.36
	- Carpet Layer	18.70
10	- Electrician, Maintenance	25.37
	- Electronics Technician Maintenance I - Electronics Technician Maintenance II	22.08
	- Electronics Technician Maintenance II - Electronics Technician Maintenance III	23.44
	- Fabric Worker	24.70
	- Fire Alarm System Mechanic	17.90
	- Fire Extinguisher Repairer	21.46 16.50
	- Fuel Distribution System Mechanic	22.81
	- Fuel Distribution System Mechanic	19.38
		17.50

23370	- General Maintenance Worker	20.91
	- Ground Support Equipment Mechanic	24.46
	- Ground Support Equipment Servicer	18.71
	- Ground Support Equipment Worker	19.90
	- Gunsmith I	16.50
	- Gunsmith II	19.18
	- Gunsmith III	21.46
	- Heating, Ventilation And Air-Conditioning Mechanic	21.96
	- Heating, Ventilation And Air Contditioning Mechanic (Research	
23.13	- Heating, Ventilation and Air Contditioning Mechanic (Research	ch racifity)
	Hoarn, Equipment Maghania	21 46
	- Heavy Equipment Mechanic - Heavy Equipment Operator	21.46
	- Instrument Mechanic	21.46
		21.46
	- Laboratory/Shelter Mechanic	20.36
	- Laborer	14.27
	- Locksmith	19.76
	- Machinery Maintenance Mechanic	21.77
	- Machinist, Maintenance	21.52
	- Maintenance Trades Helper	15.10
	- Metrology Technician I	21.46
	- Metrology Technician II	22.61
	- Metrology Technician III	23.72
	- Millwright	23.30
	- Office Appliance Repairer	21.00
	- Painter, Maintenance	20.36
	- Pipefitter, Maintenance	22.76
23810	- Plumber, Maintenance	20.99
23820	- Pneudraulic Systems Mechanic	21.46
23850	- Rigger	21.46
23870	- Scale Mechanic	19.18
23890	- Sheet-Metal Worker, Maintenance	21.46
	- Small Engine Mechanic	20.05
	- Telecommunications Mechanic I	25.22
23932	- Telecommunications Mechanic II	26.58
23950	- Telephone Lineman	24.43
	- Welder, Combination, Maintenance	21.46
	- Well Driller	21.46
	- Woodcraft Worker	21.46
	- Woodworker	16.50
	Personal Needs Occupations	20.00
	- Child Care Attendant	11.58
	- Child Care Center Clerk	16.15
	- Chore Aide	9.58
	- Family Readiness And Support Services Coordinator	12.95
	- Homemaker	16.75
	Plant And System Operations Occupations	10.75
	- Boiler Tender	24.98
	- Sewage Plant Operator	20.23
	- Stationary Engineer	24.98
	- Ventilation Equipment Tender	17.56
	- Water Treatment Plant Operator	20.23
	Protective Service Occupations	40 66
	- Alarm Monitor	17.66
	- Baggage Inspector	11.51
	- Corrections Officer	19.83
	- Court Security Officer	23.26
	- Detection Dog Handler	17.66
	- Detention Officer	19.83
	- Firefighter	22.39
27101	- Guard I	11.51

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27102	- Guard II			17.66
27131	- Police Officer I			23.94
27132	- Police Officer II			26.60
28000 -	Recreation Occupations			
28041	- Carnival Equipment Operator			12.35
28042	- Carnival Equipment Repairer			13.30
28043	- Carnival Equpment Worker			8.40
28210	- Gate Attendant/Gate Tender			13.01
	- Lifeguard			11.59
28350	- Park Attendant (Aide)			14.56
28510	- Recreation Aide/Health Facility Attendant			10.62
	- Recreation Specialist			18.04
	- Sports Official			11.59
	- Swimming Pool Operator			16.85
	Stevedoring/Longshoremen Occupational Services			
	- Blocker And Bracer			20.55
	- Hatch Tender			20.55
	- Line Handler			20.55
	- Stevedore I			19.18
	- Stevedore II			21.64
	Technical Occupations			
	- Air Traffic Control Specialist, Center (HFO) (2)			34.71
	- Air Traffic Control Specialist, Station (HFO) (2			23.94
	- Air Traffic Control Specialist, Terminal (HFO) (	2)		26.36
	- Archeological Technician I			17.06
	- Archeological Technician II			19.03
	- Archeological Technician III			23.76
	- Cartographic Technician			24.85
	- Civil Engineering Technician			22.19
	- Drafter/CAD Operator I			17.92
	- Drafter/CAD Operator II - Drafter/CAD Operator III			20.06
	- Drafter/CAD Operator IV		65	22.36 27.51
	- Engineering Technician I			20.19
	- Engineering Technician II		50	22.67
	- Engineering Technician III			25.37
	- Engineering Technician IV			31.43
	- Engineering Technician V			38.44
	- Engineering Technician VI			46.51
	- Environmental Technician			21.36
	- Laboratory Technician			22.36
	- Mathematical Technician			26.31
	- Paralegal/Legal Assistant I			20.03
	- Paralegal/Legal Assistant II			24.82
	- Paralegal/Legal Assistant III			30.35
	- Paralegal/Legal Assistant IV			36.73
	- Photo-Optics Technician			24.85
30461	- Technical Writer I		20.69	
30462	- Technical Writer II			25.30
30463	- Technical Writer III			30.61
30491	- Unexploded Ordnance (UXO) Technician I			22.06
	- Unexploded Ordnance (UXO) Technician II			26.69
30493	- Unexploded Ordnance (UXO) Technician III			31.99
	- Unexploded (UXO) Safety Escort			22.06
	- Unexploded (UXO) Sweep Personnel			22.06
	- Weather Observer, Combined Upper Air Or Surface	Programs	(2)	22.14
	- Weather Observer, Senior (2)			23.98
	Transportation/Mobile Equipment Operation Occupati	ons		
	- Bus Aide			11.99
31030	- Bus Driver			17.54

31043	- Driver Courier	12.71
31260	- Parking and Lot Attendant	9.06
31290	- Shuttle Bus Driver	13.89
31310	- Taxi Driver	13.98
31361	- Truckdriver, Light	13.89
31362	- Truckdriver, Medium	17.09
31363	- Truckdriver, Heavy	18.40
31364	- Truckdriver, Tractor-Trailer	18.40
99000 -	Miscellaneous Occupations	
99030	- Cashier	10.03
99050	- Desk Clerk	10.45
99095	- Embalmer	21.77
99251	- Laboratory Animal Caretaker I	10.47
99252	- Laboratory Animal Caretaker II	10.85
99310	- Mortician	27.25
99410	- Pest Controller	14.54
99510	- Photofinishing Worker	11.59
99710	- Recycling Laborer	15.73
99711	- Recycling Specialist	18.72
99730	- Refuse Collector	14.01
99810	- Sales Clerk	11.87
99820	- School Crossing Guard	11.37
	- Survey Party Chief	19.76
99831	- Surveying Aide	12.28
99832	- Surveying Technician	18.78
99840	- Vending Machine Attendant	12.61
99841	- Vending Machine Repairer	16.37
99842	- Vending Machine Repairer Helper	12.61

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$3.16 per hour or \$126.40 per week or \$547.73 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year, New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

- 1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)
- 2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will parn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your

regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiar, materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiar, materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordance, explosives, and incendiary material differential pay.

#### \*\* UNIFORM ALLOWANCE \*\*

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona file collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "vash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

The duties of employees under job titles listed are those lescribed in the "Service Contract Act Directory of Occupations", Fifth Edition, April 2006, unless otherwise indicated. Copies of the Directory are available on the Internet. A links to the Directory may be found on the WHD home page at http://www.dol.gov/esa/whd/ or through the Wage Determinations On-Line (WDOL) Web site at http://wdol.gov/.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form

1444 (SF 1444)}

#### Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary vages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, an 1/or fringe benefits shall be retroactive to the commencement date of the contract. (See Section 4.6 (C)(vi)) When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the  $n \ge d$  for a conformed occupation) and computes a proposed rate).
- 2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalenc, (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.3. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour decision to the contractor.
- 6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

#### ATTACHMENT D

## AOC PAST PERFORMANCE QUESTION INAIRE RFP No. 080040

# ANNUAL MAINTENANCE FOR ELECTRICAL EQUIPMENT, U.S. CAPITOL POWER PLANT, WASHINGTON, D.C.

The company listed below is preparing an offer on the above projec for the Architect of the Capitol, Washington, DC. Your name has been provided as a customer reference regarding performance under a past contract with your agency/company. Your comments are considered Source Selection Sensitive, therefore, you are advised that your response will be safeguarded to the extent cited in the Federal Acquisition Regulation (FAR) 42.1503. FAR prohibits the release of past performance evaluations to other than other Government personnel and the company whose performance is being evaluated during the period the information may be used to provide source selection information.

This past performance questionnaire is being submitted by the contractor and you are requested complete it and return it to the Architect of the Capitol in care of John Friedhoff at FAX number (866) 837-6818 on, or before the proposal submission due date. While all elements below may not apply, please complete as much as possible.

#### Company/Individual Requesting Past Project Information:

Name:

Past Project Title On Which The Company Is Being Evaluated

**Project Title:** 

#### **Evaluator POC (for verification purposes)**

Name: Agency/Company, POC Date:

Phone No.: Fax No.

E-mail Address:

Address:

Position held or function in relation to project:

Ratings: Please evaluate the contractor's performance using the follo ving ratings:

"O" Outstanding The contractor's performance clearly exceeded the contract requirements.

# AOC PAST PERFORMANCE QUESTIONNAIRE RFP080040

"S" Satisfactory
"M" Marginal

"I"

Unsatisfactory

The contractor's performance met the contract requirements. The

contractor's performance met the minimum contract requirements but with difficulty. The contractor's performance was poor and/or did not satisfy

contract requirements.

Please rate and provide supporting information for the following. If the rating is Outstanding or Unsatisfactory, please provide specific contract/job performance are as which were exceeded or not performed in accordance with the contract's minimum requirements. (Use additional sheets as needed)

1. Performance in meeting delivery/completion schedules: \_\_\_\_\_

#### Rating:

2. What did the contractor do to improve or resolve schedule problems, if any?

#### Rating:

3. The contractor's quality control (CQC).

#### Rating:

- 4. The contractor's performance in delivering quality work in accordance with the contract:
- The contractor's ability to provide the required work at a reaso table total price.

#### Rating:

6. The contractor's compliance with labor standards, if applicable.

#### Rating:

7. The contractor's compliance with safety standards.

#### Rating:

8. Has the contractor been given any of the following: Cure notice show cause, letters of reprimand, suspension of payments, termination? If yes, please explain.

# Rating: AOC PAST PERFORMANCE QUESTIONNAIRE RFP0 30040

9. Would you award another contract to this contractor? If 10, please state reasons for not recommending this contractor additional work.

Rating:

	Rating:
11. The relationship between the contractor and owner's contract team	Contracting Officer/COR/COTR?
12. The contractor's on-site management and coordination of subcont	Rating:
	Rating:
13. The contractor's overall corporate management, integrity, reasonate	a pleness and cooperative conduct.
Has the contractor filed any modifications? How makes the contractor been provided an opportunity to discuss as so, what were the results?  OVERALL RATING Rating: Please provide any additional comments:	1.00

10. Was the customer satisfied with the end product?

AOC PAST PERFORMANCE QUESTIC NNAIRE RFP080040

# AOC PAST PERFORMANCE QUESTIONNAIRE RFP No. 080040

# ANNUAL MAINTENANCE FOR ELECTRICAL EQUIPMENT, U.S. CAPITOL POWER PLANT, WASHINGTON, D.C.

The company listed below is preparing an offer on the above project for the Architect of the Capitol, Washington, DC. Your name has been provided as a customer reference regarding performance under a past contract with your agency/company. Your comments are considered Source Selection Sensitive, therefore, you are advised that your response will be safeguarded to the extent cited in the Federal Acquisition Regulation (FAR) 42.1503. FAR prohibits the release of past performance evaluations to other than other Government personnel and the company whose performance is being evaluated during the period the information may be used to provide source selection information.

This past performance questionnaire is being submitted by the contractor and you are requested complete it and return it to the Architect of the Capitol in care of John Friedhoff at FAX number (866) 837-6818 on, or before the proposal submission due date. While all elements below may not apply, please complete as much as possible.

## Company/Individual Requesting Past Project Information:

Name:

Past Project Title On Which The Company Is Being Evaluated

Project Title:

### Evaluator POC (for verification purposes)

Name: Agency/Company, POC Date:

Phone No.: Fax No.

E-mail Address:

Address:

Position held or function in relation to project:

**Ratings:** Please evaluate the contractor's performance using the following ratings:

"O" Outstanding The contractor's performance clearly exceeded the contract requirements.

# AOC PAST PERFORMANCE QUESTIONNAIRE RFP080040

"S" Satisfactory

"M" Marginal

"U"

Unsatisfactory

The contractor's performance met the contract requirements. The contractor's performance met the minimum contract requirements but with difficulty. The contractor's performance was poor and/or did not satisfy

contract requirements.

Please rate and provide supporting information for the following. If the rating is Outstanding or Unsatisfactory, please provide specific contract/job performance areas which were exceeded or not performed in accordance with the contract's minimum requirements. (Use additional sheets as needed)

1.	Performance in meeting	delivery/completion schedules:	

#### Rating:

2. What did the contractor do to improve or resolve schedule problems, if any?

### Rating:

3. The contractor's quality control (CQC).

# Rating:

- 4. The contractor's performance in delivering quality work in accordance with the contract: Rating:
- 2 The contractor's ability to provide the required work at a reasonable total price.

# Rating:

6. The contractor's compliance with labor standards, if applicable.

# Rating:

7. The contractor's compliance with safety standards.

# Rating:

8. Has the contractor been given any of the following: Cure notice, show cause, letters of reprimand, suspension of payments, termination? If yes, please explain.

# Rating: AOC PAST PERFORMANCE QUESTIONNAIRE RFP080040

9. Would you award another contract to this contractor? If no, please state reasons for not recommending this contractor additional work.

Rating:

Rating:
11. The relationship between the contractor and owner's contract team/Contracting Officer/COR/COTR?
Rating:  12. The contractor's on-site management and coordination of subcontractors.
Rating:
13. The contractor's overall corporate management, integrity, reasonableness and cooperative conduct.
Rating:  Has the contractor filed any modifications? How many? And to what extent?  Has the contractor been provided an opportunity to discuss any negative performance ratings? If so, what were the results?  OVERALL RATING Rating: Please provide any additional comments:

10. Was the customer satisfied with the end product?

AOC PAST PERFORMANCE QUESTIONNAIRE RFP080040

#### \*\*\*\* NOTICE \*\*\*\*

TO: ALL VENDORS/CONTRACTORS/CONSULTANTS

FROM: THE OFFICE OF THE ARCHITECT OF THE CAPITOL

Due to requirements set forth in the DEBT COLLECTION IMPROVEMENT ACT OF 1996 (PUBLIC LAW 104-134), all payments made to vendors, contractors and consultants doing business with the Federal Government must be made by Electronic Funds Transfer (EFT) directly to your financial institution. If you are currently enrolled under EFT with the Architect of the Capitol, no further action is necessary other than to report changes.

EFT payments are cost effective, enabling prompt, convenient and reliable payments directly to a designated bank account.

The Architect of the Capitol, in making EFT payments, supplies the financial institution with identifying information (ie. invoice number), which accompanies each transaction. The financial institution in turn can supply this information to the account holder.

Therefore, to accomplish the mandate of P. L. 104-134, it is necessary that the attached sheet; PAYMENT INFORMATION FORM ACH VENDOR PAYMENT SYSTEM be completed and returned with your bid or offer as set forth in Section G of the solicitation.

# PAYMENT INFORMATION FORM ACH VENDOR PAYMENT SYSTEM

This form is used for ACH payments with an addendum record that carries payment-related information. Recipients of these payments should bring this information to the attention of their financial institution when presenting this form for completion. The information will be transmitted in the CCD+ format to the designated financial institution.

#### **Debt Collection Improvement Act of 1996**

#### PAPERWORK REDUCTION ACT STATEMENT

The information being collected on this form is pursuant to Public Law 104-134, which mandated Electronic Funds Transfer for recipients of all federal payments (excluding IRS tax refunds) beginning July 24, 1996. This information will be needed by the Treasury Department to transmit payments and related data.

COMPANY INFORMATION		
NAME:		
ADDRESS:		
CONTRACT NUMBER: AOC	TAXPAYER IDENTIFICATION NUMBER (TIN):	
CONTACT PERSON NAME:	TELEPHONE NUMBER: ( ) FAX NUMBER: ( )	
AGENCY	INFORMATION	
NAME: ARCHITECT OF THE CAPITOL - FORD HOUSE OFF	ICE BUILDING	
ADDRESS: ACCOUNTING DIVISION, ROOM H2-205		
WASHINGTON, D.C. 20024	FAX NUMBER: (202) 225-7321	
CONTACT PERSON NAME: MR. JAMES JARBOE	TELEPHONE NUMBER: (202) 226-2552	
FINANCIAL INSTI	TUTION INFORMATION	
BANK NAME:		
BRANCH LOCATION: (If applicable)		
CONTACT NAME:	TELEPHONE NUMBER: ( )	
NINE DIGIT ROUTING TRANSIT NUMBER:		
DEPOSITOR ACCOUNT NUMBER:		
TYPE OF ACCOUNT: CHECKING SAVINGSLOCKBOX		
SIGNATURE AND TITLE OF REPRESENTATIVE:	TELEPHONE NUMBER:	

Architect of the Capitol Revised 06/11/99

For AOC us	e only:
ID required	
No ID	



# UNITED STATES CAPITOL POLICE WASHINGTON, D.C. 20510-7218

# REQUEST FOR CHECK OF CRIMINAL HISTORY RECORDS

Please report with: (1) a form of valid photo identification and (2) this form; to the Identification Section, Room 103B, U.S. Capitol Police Headquarters, 119 D Street, N.E.

1 Name (Last, First, Middle)	Address:Street & No
	City & State Zip Tele:
2 Other names ever used (e.g. m	aiden name, nickname, etc.)
3 Date of Birth (Month, Day, Year,	Birthplace (City and State or County)
5 Social Security Number	6 Sex
7 Race 8 Height 9	Weight 10 Eye Color 11 Hair Color

# SIGNATURE AND RELEASE OF INFORMATION:

# READ THE FOLLOWING CAREFULLY BEFORE YOU SIGN:

- I understand that the information provided above will be used to check the criminal history records of the Federal Bureau of Investigation (FBI).
- I consent to the use of the information provided above in making a security determination concerning me.
- I certify that, to the best of my knowledge and belief, all the information provided above is true, correct, and complete, and made in good faith.

	true, correct, and compl	ete, and made in good :	faith.	
			*	
12	Signature	13	B Date Signed (Month,	Day, Year)

AUTHORIZED REQUESTER.	
14 Name/Employing Office	
15 Title	
16 Telephone number	17 Date of Request
SIGNATURE AND REQUEST:	
Capitol Police and that these fingerprin	dicated above be fingerprinted by the United States its be submitted for a check of the criminal history igation (FBI). This check will be used in making a applicant/employee.  19 Date Signed (Month, Day, Year)
inentifications ections ==	
20 Individual Receiving Request	
21 Date/Time Received	
22 IS #:	

#### AOC52.215-4

#### Contract Award (Jun 2004)

- (a) The Government will evaluate offers in response to this solicitation without discussions and will award a contract to the responsible offeror whose offer, conforming to the solicitation, will be most advantageous to the Government considering only price and the price-related factors specified elsewhere in the solicitation. Therefore, the offeror s in itial proposal should contain the offeror s best terms from a price standpoint. The Government reserves the right to conduct discussion
- (b) The Government may
- (1) Reject any or all offers;
- (2) Accept other than the lowest offer; and
- (3) Waive informalities or minor irregularities in offers received.
- (c) The Government may accept any item or combination of items, unless doing so is precluced by a restrictive limitation in the solicitation or the offer.
- (d) A written award or acceptance of offer mailed or otherwise furnished to the successful of error within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. I efore the offer's specified expiration time, the Government may accept an offer (or part of an offer as provided in Paragraph (c) of this clause), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. I egotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.

(e) Neither financial data submitted with an offer, nor representations concerning facilities or financing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, i accurate, or not current.

(f) The Government may determine that an offer is unacceptable if the prices proposed are m terially unbalanced between line items or sub line items. Unbalanced pricing exists when, despite an acceptable total evaluated price the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable sk to the Government.

(End of provision)

#### SECTION M

#### EVALUATION FACTORS FOR AWARD

## M.1 PROPOSAL EVALUATION CRITERIA (AOC) (JUN 2003)

.1 The evaluation criteria to be used by the Contracting Officer for the selection of a contractor to perform the work specified are defined below. The criteria are divided into technical and price categories which consist of subsections corresponding to those in the article entitled INSTRUCTIONS FOR PREPARING THE TECHNICAL PROPOSAL and the article entitled INSTRUCTIONS FOR PI EPARING THE PRICE PROPOSAL in Section L. The technical criteria are considered by the Architect to be generally more important

RFP080040

than price criteria. However, as the difference in technical merit between the p oposals becomes less significant, the relative importance of the price will increase.

.2 TECHNICAL CRITERIA. Each offeror s proposal will be evaluated in accordance with the technical criteria listed below to determine whether it is responsive to the requirements of the R P and are therefore acceptable. Technical criteria are listed below in descending order of importance:

#### .1 Factor 1 Quality Control -

1. The Offeror's Quality Control will be evaluated to determine if the procedures which address Welding Procedure Specifications and Procedure Qualification Records for each repair vill fulfill the requirements and objectives under this solicitation. As well as How their Plan of Accomplishment to will fullfill the requirements under this solicitation.

#### .2 Factor 2 - Corporate Experience (General Contractor/Major Subcontractor). -

- 1. The Offeror s and the proposed subcontractors experience will be evaluated o determine the extent of successful completion of projects, performed within the past three years, with minimum of three successfully completed projects of similar scope, size and complexity to the requirements of this project (Services for preventative maintenance and repairs).
- 2. The experience with the subcontractors and related projects will be evaluate for the extent of successful completion of projects, performed within the past three years, of similar scope, size and complexity to the requirements of this project (Services for preventative maintenance and repairs.

#### .3 Factor 3 - Key Personnel (Project Manager and Field Technicians) -

- 1. The Government will evaluate the qualifications and experience on the resultes of the Offeror's key personnel, including Project Manager and field technicians.
- 2. The purpose of the key personnel information is to evaluate the Offeror s ab ity to provide quality personnel who have the necessary qualifications and experience, in terms of training, bac ground, and recent technical experience, to successfully perform the requirements of this solicitation.

#### .4 Factor 4 - Past Performance (General Contractor/Major Subcontractor ) -

- 1. The Offeror s and the proposed subcontractors past performance will be evaluated to determine the extent of successful completion of projects, performed within the past three years, of sin ilar scope, size and complexity to the requirements of this project (Services for preventive maintenance and regains).
- 2. The AOC will use references provided (Past Performance Questionnaire) in his factor to verify the offeror s and proposed subcontractors past performance relative to conforming to contrate trequirements, meeting prescribed schedules, and history of reasonable and cooperative behavior. Time liness and degree of client satisfaction for each project will be taken into consideration. Proposed subcont actors will be evaluated to determine if their qualifications are sufficient to carry out their portion of the work as described in the specification. The AOC may use other references/information to verify past performance.
- .3 PRICE CRITERIA. The Government will evaluate the price proposals of all "irms found technically qualified. Price criterion measure not only actual dollars but also analyze reaso ableness of the Offeror's proposed price and its position in the range of all prices.

Contract Award - Source Selection Procedures (Jun 2004)

- (a) The Government will award a contract resulting from this solicitation to the responsible of error whose offer conforming to the solicitation will be most advantageous to the Government, cost or price and other factors, spe ified elsewhere in this solicitation, considered.
- (b) The Government may
- (1) Reject any or all offers if such action is in the public interest;
- (2) Accept other than the lowest offer; and
- (3) Waive informalities and minor irregularities in offers received.
- (c) The Government intends to evaluate proposals and award a contract without discussions w h offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror s initial proposal should contain the offeror's best terms from a price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Office relater determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in he competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit he number of proposals in the competitive range to the greatest number that will permit an efficient competition among the roost highly rated proposals.

- (d) The Government may accept any item or combination of items, unless doing so is preclude 1 by a restrictive limitation in the solicitation or the offer.
- (e) A written award or acceptance of offer mailed or otherwise furnished to the successful offer or within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. B fore the offer's specified expiration time, the Government may accept an offer (or part of an offer as provided in Paragraph (d) of his provision), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. N gotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.

(f) Neither financial data submitted with an offer, nor representations concerning facilities or f nancing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, in ccurate, or not current.

(g) The Government may determine that an offer is unacceptable if the prices proposed are magrially unbalanced between line items or sub line items. Unbalanced pricing exists when, despite an acceptable total evaluated price, he price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable ri k to the Government.

(End of provision)

#### 52.252-1 Sec. M

#### 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same fc ce and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror i cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or o fer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically in this/these address(es):

www.gsa.gov or www.arnet.gov

(End of provision)

Clauses By Reference

Clause	Title	Date
52.217-5	Evaluation Of Options	11/08/2006